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Finnic-Saamic labial vowels in non-initial syllables: An etymological evaluation

Abstract In the current article, a critical analysis is conducted of the corpus of proposed Finnic-Saamic etymological cognates showing second-syllable labial vowels in both language groups. The data is taken from the etymological dictionary *Suomen sanojen alkuperä* (SSA, 1992–2000) and assessed in the light of current research on Uralic sound history and language contacts. The analysis reveals that more than half of the cognate pairs previously suggested by SSA cannot be regarded as actual cognates including their stem vowels, but should instead be viewed as the results of loan contacts and parallel developments. There are, however, a dozen cognate pairs with sound correspondences undeniably showing inheritance from a common protolanguage and thus suggesting that the development of second-syllable labial vowels may have originated in a common Finno-Saamic protolanguage, even if their wider adoption in the phonological and morphological systems of these languages did not take place until later.*

* The article is based on the author's Master's thesis (Kuokkala 2012), but the data sources have been more thoroughly checked through and the analyses partly revised. I wish to thank all my research seminar colleagues as well as Ante Aikio and an anonymous reviewer for their useful comments on previous versions of the text.

Background and aims

The traditional shape of the family tree of the Uralic languages (cf. Setälä 1926) began to be questioned towards the end of the 20th century, and especially since Kaisa Häkkinen's critical survey of the Uralic vocabulary (1984a; 1984b), a re-evaluation of the relationship between different branches of the language family has been taking place. For example, the traditional division into Finno-Ugric and Samoyedic has been challenged by Jaakko Häkkinen (2007), who proposed primary units of Finno-Permic and Ugro-Samoyedic, and the existence of several intermediate protolanguages, such as Proto-Ugric, has been questioned (see e.g. Salminen 2002). The descentance of the Finnic and Saamic branches from a common Finno-Saamic protolanguage also appears to be less certain than previously thought: in terms of phonological systems, there is only one common innovation separating these two branches from the other Uralic branches, namely the labial vowels of non-initial syllables, and even the dating of this single feature to a common protolanguage has been questioned by some scholars (e.g. T. Itkonen 1997). Though criteria other than those related to phonology, such as morphological and lexical innovations, are equally important in determining linguistic lineages, it is questionable whether an intermediate protolanguage with hardly any characteristic phonological features can be regarded as realistic.

The aim of the current article is to critically evaluate the etymological data presumed to support the reconstruction of a Finno-Saamic second-syllable labial vowel. This enables us to form a more solid picture of the relationship between these two language branches and to better assess the grounds for postulating a common protolanguage for them.

Data and methods

The material for the current study derives from the latest comprehensive etymological dictionary of Finnish, *Suomen sanojen alkuperä* (SSA). From SSA, I have collected all the proposed Saami-Finnic etymological cognate pairs where both the Saamic and the Finnic word

stem contain a labial vowel in a non-initial syllable (at least in some dialects). This gives us 74 cognate pairs in total. Additionally, I discuss a couple of comparisons put forward in other scholarly works.

The analysis of the data consists of detailed scrutiny of the meaning and sound correspondences of the supposed cognates, as well as their geographical distribution and variation, in order to determine whether the words, with their labial vowels, represent acceptable etymological cognates, or whether they are more probably loans from one language group into another or of a completely different origin. As the first volume of SSA already dates from more than twenty years ago, there is much current etymological research to take into account. Especially in the study of loan contacts between Saamic and Finnic, more precise criteria have been proposed for distinguishing between loanwords and cognates (see e.g. Aikio 2009; Ylikoski 2010). This concerns first and foremost phonological criteria, but semantics and distribution have also been more consistently taken into account in recent works. For example, the distribution of a Finnic word confined only to Finnish or Karelian dialects (in former Saami-speaking area) is indicative of a possible loan from Saami. When a morphologically complex-looking word has no base-word or parallel derivatives in the same language (group), or when a word has only a specialized or abstract meaning but the corresponding word in the neighboring language group has both the specialized and a more general meaning, there is also reason to suspect a loan connection rather than common inheritance.

As regards phonology, the alleged cognate items should show regular sound correspondences found in established cognate vocabulary. Exceptional developments should have a plausible explanation (e.g. a shift from a back to a front vowel class due to the assimilative effect of palatal consonantism), but irregularity should always add to the uncertainty of a comparison. Stricter criteria have been adopted in that e.g. Korhonen (1981) and SSA have considered Proto-Saami **ā* a possible successor of Finno-Saamic initial-syllable **a* (> Finnic *a*) in addition to the regular Proto-Saami **uo*, but lately the correspondence (Saa. *ā* : Fi. *a*) has been regarded as a feature characteristic of only loanwords (cf. Aikio 2009: 54; Kuokkala 2012: 39–41). Ante Aikio (2007; 2009) has also drawn attention to the systematic acknowledgement

and addressing of the phenomenon known as etymological nativization. Apart from the principle of substituting sounds with the phonetically closest ones when adapting loanwords (= phonetic nativization), peculiar substitution patterns may arise in situations where bilingual speakers are proficient in two languages sharing a notable amount of recognizable cognate vocabulary. When the speakers become aware of the recurring sound correspondences between the two languages, they begin to apply the same patterns to new loanwords as well. This, of course, makes it difficult and sometimes impossible to distinguish between a loanword and a cognate on phonological grounds. Fortunately, however, etymological nativization tends to become prevalent only in certain patterns frequent enough in the legacy vocabulary. In loans between Finnic and Saami, this phenomenon affects only vowels. The basic stem vowels (Fi. *a/ä* : SaaN *i* and Fi. *e/i* : SaaN *a*) almost exclusively show etymological substitution (e.g. Fi. *arka* ‘shy’ → SaaN *árgi* ‘id.’; Fi. *arki* ‘workday’ → SaaN *árga* ‘id.’), whereas e.g. the initial-syllable Fi. *i* oscillates between etymological (Fi. *ilman* ‘without’ → SaaN *almmá* ‘id.’) and phonetic (Fi. *ilma* ‘air; weather’ → SaaN *ilbmi* ‘weather; world’) nativization. Notably, the initial-syllable etymological correspondences Fi. *a* : Saa. *uo* and Fi. *ä* : Saa. *ā* (before FS low vowels) are virtually never attested in loanwords. The following table summarizes the substitution patterns of loans from Finnic into Saami, presented in Aikio (2007). The substitutes in parentheses occur only in isolated cases. The same patterns generally apply to loans in the opposite direction, too.

On transcription

The language material is presented using a contemporary Latin orthography of the languages in question when applicable, or otherwise a phonematic transcription based on the Uralic Phonetic Alphabet (also known as the Finno-Ugric Transcription, see e.g. Sovijärvi & Peltola 1977). Quotes from old dictionaries and non-Uralic languages are, however, usually given as they appear in the source. (As for the orthographies of the Saami languages, see Sammallahhti & Mosnikoff 1991 (Skolt), Sammallahhti & Morottaja 1993 (Inari), Spiik 1994

1 st syllable			2 nd syllable		
Finnish	N. Saami	Example	Finnish	N. Saami	Example
<i>i</i>	<i>a</i>	<i>hinta</i> → <i>haddi</i>	<i>i</i>	<i>a</i>	<i>pappi</i> → <i>báhppa</i>
<i>i</i>	<i>i</i>	<i>ilma</i> → <i>ilbmi</i>			
<i>u</i>	<i>o</i>	<i>kuva</i> → <i>govva</i>	<i>u</i>	<i>a</i>	<i>haju</i> → <i>hádja</i>
<i>u</i>	<i>u</i>	<i>kulma</i> → <i>gulbmi</i>	<i>u</i>	<i>u</i>	<i>hoppu</i> → <i>hoahppu</i>
<i>y</i>	<i>i</i> (a)	<i>kylä</i> → <i>gilli</i>	<i>y</i>	<i>a</i>	<i>synty-</i> → <i>šadda-</i>
<i>y</i>	<i>u</i>	<i>tyyty-</i> → <i>duhta-</i>	<i>y</i>	<i>u</i>	<i>pysy-</i> → <i>bissu-</i>
<i>e</i>	<i>ea</i>	<i>estä-</i> → <i>easti-</i>	<i>e : i</i>	<i>a</i>	<i>pääse-</i> → <i>beassa-</i>
<i>o</i>	<i>oa</i> (<i>o</i>)	<i>sota</i> → <i>soahti</i>	<i>o</i>	<i>u</i>	<i>aiko-</i> → <i>áigu-</i>
<i>vo</i>	<i>vuo</i>	<i>voitta-</i> → <i>vuoti-</i>			
<i>ä</i>	<i>ea</i> (á)	<i>hätä</i> → <i>heahti</i>	<i>ä</i>	<i>i</i> (á)	<i>kylä</i> → <i>gilli</i>
<i>a</i>	<i>á</i> (a)	<i>alka-</i> → <i>álgi-</i>	<i>a</i>	<i>i</i> (á)	<i>hinta</i> → <i>haddi</i>

Table 2: Phoneme substitutions in loans from Finnic into Saami. The items with a shaded background reflect etymological correspondence patterns and the items in bold face show phonetic motivation for substitution. Second-syllable **u/y – a** follows the etymological pattern of the “basic” stem vowel **i – a**.

(Lule), Lehtiranta 1992 (Pite), and Bergsland & Mattsson Magga 1993 (South Saami); for others, see Lehtiranta 1989.)

The Proto-Saami forms reflect Late Proto-Saami. The length and quality distinctions conditioned by consonant gradation are considered non-phonological and are thus not indicated in the transcription (cf. Korhonen 1981: 136 and the practise in e.g. Aikio 2009). The phonology corresponds to that of Lehtiranta (1989), with the exception of the diphthongization of stressed long vowels (*ē, ē̄, ō, ō̄* ~ here: *ie, ea, uo, oa*).

Research history and current views

Since E. Itkonen (1954) it has been a common view that Finnic and Saamic non-initial-syllable labial vowels are the result of a common Finno-Saamic innovation involving the fusion of an old stem vowel

(*a*, *ä*, *e*) with a suffixal labial consonant (*v/w*). Previously at least Lehtisalo (1936) had assumed this kind of Uralic suffixal element, and Collinder (1945) thought that even the labial vowels might go back to Proto-Uralic, considering e.g. Fi. *nato* ‘husband’s sister’ ~ Nen. *nādū* ‘spouse’s younger brother’ as evidence. According to Itkonen, though, it is more probable that the fusion of the labial consonant took place only after the Proto-Finno-Mordvinic stage, since both Mansi and Mordvin have retained the labial consonant in passive-reflexive derivatives such as MdE *nejav-* ‘to be seen’ ~ Fi. *näky-* ‘id.’ < PFM **näke-v(e)-*. A similar development pattern has been assumed for the nominal derivative type of Fi. *teko*, SaaN *dahku* ‘deed’ < FS **teke-v(e)*, although no traces of a labial consonant have been found. Common Finno-Saamic labial-stem words that cannot be readily analyzed as derivatives have instead been interpreted as secondary developments after the non-initial-syllable labial vowels had taken their place in the phonemic system, cf. Fi. *pato* ~ SaaN *buodđu* ‘dam’ and Fi. *puhu-a* ‘speak; blow’ ~ SaaN *bossu-t* ‘blow’. The previous two word pairs, as well as Fi. *kutsu-a*, SaaN *gohčču-t* ‘call’, also show consonant correspondences of inherited words that could not have occurred if the words had been borrowed later from Finnic into Saami or vice versa and have thus been taken as a proof of existence of the labial vowel in the Saami-Finnic protolanguage.

According to E. Itkonen (1954), the Proto-(Saami-)Finnic development of different combinations of a stem vowel + **v* was the following:

**ev* > **eu* > **ū* > *u* (back-vocalic words; e.g. **lukev* > *luku* ‘reading; number’)

**ev*, **äv* > **eü*, **äü* > **ū* > *ü* (front-vocalic words; e.g. **näkev-* > *näky-* ‘to be seen’)

**av* > **au* > **ō* > *o* (nominal derivatives; e.g. **palav* > *palo* ‘burning, fire’)

**av* > **au* >> *u* (verbal derivatives; e.g. **valav-* > *valu-* ‘to pour (intr.)’)

The analogical shift of the verbal derivatives from **av* >> **o* to **u* was supposedly due to the greater number of *-u/-ü* derivatives stemming

regularly from roots ending in **-ä* or **-e*. In nominal derivatives, on the other hand, both *-o* and *-u* endings remained productive though the original phonological conditions were obscured (cf. Fi. *näk-ö* ‘seeing’ ~ *näk-y* ‘sight’). According to this view, then, the Proto-Finno-Saamic vowel paradigm of non-initial syllables already contained three distinct labial vowels: /o/, /u/ and /ü/. (Finnic /ö/ is undoubtedly a more recent phoneme and even today occurs in non-initial syllables only in the northern Finnic varieties.) In the following decades, though, it became a standard view that the Saami-Finnic protolanguage had only one labial vowel phoneme in unstressed syllables, namely /o/, which was a systemic pair of the non-low illabial vowel /e/ (or /u/ : /i/, respectively) (cf. e.g. Korhonen 1981: 98–99; Lehtinen 2007: 83). This is reasonable on account of the symmetry of the vowel paradigm as well as the fact that different non-initial-syllable labial vowels in Saami can be derived from one (Pre-)Proto-Saami vowel with conditioned sound changes (cf. Korhonen 1981: 102). Recently, however, Petri Kallio (2012: 31–23) has pointed out that no conditioning factors can be shown for the implied split of one original Pre-Finnic vowel phoneme into /o/ and /u/ (~ /ü/) in Finnic, and he thus prefers the scheme proposed by E. Itkonen in Proto-Finnic and an independent emergence of the suffixal labial vowel in Proto-Saami.

In Proto-Finnic, the frequency of labial vowels in non-initial syllables was multiplied as a consequence of the sound change **aj > *oj*, which affected the plural forms of nouns and preterite forms of verbs as well as many derivational suffixes (Hakulinen 1979: 44; Kallio 2012). Some scholars (e.g. Ravila 1935; T. Itkonen 1997) have suggested that the adoption of the suffixal labial vowels in Saami actually occurred through Finnic loan influence after the mentioned sound change, referring to the fact that certain Saami labial-stem word classes reflect a Proto-Saami suffix **-ōj*. Sammallahti (1999: 72–73) has, however, shown that the lexemes with Saami **-ōj* do not have Finnic counterparts with the diphthong *-oi* (with the exception of SaaI *iänui* ~ Fi. *eno(i)* ‘uncle’), and that the Saami sound sequence can be explained as a contextually conditioned variant of PS **-ōv ~ *-ō < Pre-Saami *-Vv*, corresponding to Finnic plain labial vowels and derivable from a common origin with them. Yet, it is possible – and even probable – that some of the Saami derivational suffixes with labial vowels have entered the language

through Finnic loanwords, considering the extent of Finnic influence observable in the lexicon and the grammar of the Saami languages (cf. Korhonen 1981: 37, 313). The so-called *-u* continuative verbs in Saami, for instance, seem to be of heterogenous origin: there are verbs that correspond to Finnic *-u* continuatives, such as SaaN *bossut* ~ Fi. *puhua* ‘blow; speak’ and others that correspond to *-o(i)* frequentatives, e.g. SaaN *meallut* ~ Fi. *meloä* ‘paddle’. If the Finnic verb types with *-o/-oi-* are taken to descend from **-a+j-* on the whole (cf. Hakulinen 1979: 275, 299), any Saami comparisons with verbs of this type should be regarded as loans or parallel developments. Still, some of the Finnic *-o* verbs may also have roots in nominal derivatives (e.g. *usko* ‘belief’ → *uskoa* ‘believe’) and may thus originate from a common Saami-Finnic stage together with the nominal derivative type. Finally, it is not quite clear why some Saami stems corresponding to Finnic *-o/u/y* stems, allegedly deriving from **-a/ä/i+v*, contain the PS sequence **-ōj* (<**-ōv*), while others have a simple **-ō*.

In short, the Finnic and Saamic non-initial-syllable labial vowels present a variety of cases with different sound correspondences that cannot be regularly derived from a single source. A comprehensive study on the origins of different Finnic and Saami stem types with suffixal labial vowels has yet to be conducted. For the purposes of the current article, which aims at determining the corpus of lexemes for which a Finno-Saamic second-syllable labial vowel can (even conditionally) be reconstructed, the FS reconstructions are given with two distinct labial vowel qualities, **o* and **u*, in order to account for the different Finnic reflexes. The Saami **-ōj* stems are also differentiated from the **-ō* stems with a suffixal **-v* in the reconstructions.

Analysis of the etymological data

In this chapter, all of the suggested Finnic-Saamic cognate pairs from SSA involving a non-initial syllable labial vowel are scrutinized in the light of present-day knowledge of the field. The altogether 74 word comparisons include 27 verbal and 42 nominal stems, with an additional five having both verbal and nominal variants. The data has been arranged into six categories according to the results of the analysis: 1) Etymological cognates,

2) Possible cognates, 3) Loans from Finnic into Saamic, 4) Loans from Saamic into Finnic, 5) Convergent derivatives of cognate stems, and 6) Other parallel developments. Within the subsections, the entries follow alphabetical order according to the Finnish (Finnic) counterpart.¹

The title of each entry contains the Finnic and Saami words in question, preferably in their standard Finnish and North Saami forms. A question mark preceding the separating tilde (?~) indicates that SSA considers the cognate relation somewhat doubtful. Next, a tentative Proto-Finno-Saamic reconstruction is given, possibly with several alternatives if the data is ambiguous or conflicting. The distributions are given based on SSA and have been additionally checked in Álgú, YSS and the respective primary dictionaries for the part of the Saami material (Bergsland & Mattsson Magga 1993; SüdLW; Halász 1896; Schlachter 1958; LuLW; Nielsen; SSSg; InLW; Sammallahki & Morottaja 1993; Sammallahki & Mosnikoff 1991; KKLS; LW), and in many cases also in Finnic dialect dictionaries (SMS; Nirvi 1971; KKS; Kujola 1944; Zajceva & Mullanen 1972; VVS; VKSr; EMS; Wiedemann; LiW; LELSr). An underlined language abbreviation denotes an attestation not found in SSA (supplementary sources other than YSS are given in the text). Akkala Saami (A) distribution is presented only when Kildin Saami data is not available. In contrast to SSA, data from South Estonian or Võro-Seto (Vs) is consistently shown in the distribution figures, considering its apparently very early separation from other Finnic (see Kallio 2007; the distribution data is from VMS and Käsi 2011). Parentheses indicate that the word only occurs marginally or as a neologism. An apostrophe (‘) before a language abbreviation means that the corresponding words in that language only go back to an illabial second-syllable vowel.² All essential meanings of the words are given based on SSA and other dictionary data; in the case of wide variation, similar meanings may be grouped together and some apparently secondary meanings may be left out for the purpose of simplification.

1. For more comprehensive listings of semantic variants and a more detailed discussion of several entries, see Kuokkala 2012: 45–85.

2. As the Livonian unstressed vowels **u*, **ü*, **o*, **e* have merged into /u/ (or further /ə/; Posti 1948: 48–49), it is not possible to distinguish between these stem vowels on the basis of Livonian data only. In such cases, a former labial vowel is assumed when a labial vowel occurs in other southern Finnic varieties. Due to this restriction, the Livonian distributional figures are to be taken with a grain of salt.

Contents of this chapter:

Etymological cognates

- 1) Fi. *kanto* ~ SaaN *guottu*
- 2) Fi. *käly* ~ SaaN *gálojeatni*
- 3) Fi. *lastu* ~ SaaI *luás'tu*
- 4) Fi. *nato* ~ SaaS *nááte*
- 5) Fi. *pato* ~ SaaN *buodđu*
- 6) Fi. *salko* ~ SaaN *čuolggu*
- 7) Fi. *salu* ~ SaaN *suolu*
- 8) Fi. *tarpoa* ~ SaaN *duorbut*
- 9) Fi. *vajota* ~ SaaN *vuodjut*
- 10) Fi. *puhua* ~ SaaN *bossut*
- 11) Fi. *kiskoa* ~ SaaN *gaikut*
- 12) Fi. *siivo* ~ SaaN *divvut*
- 13) Fi. *kiro* ~ SaaN *garru*
- 14) Fi. *kumo* ~ SaaN *gomu-*, *gopmut*
- 15) Fi. *kutsua* ~ SaaN *gohččut*
- 16) Fi. *ulko-* ~ SaaN *olgu-*

Possible cognates

- 17) Fi. *ilo* ?~ SaaP *alluo*
- 18) Fi. *lamu* ?~ SaaN *luomus*
- 19) Fi. *luku* ~ SaaN *lohku*
- 20) Fi. *malo* ?~ SaaL *muolos*
- 21) Fi. *osua* ~ SaaN *oažžut*
- 22) Fi. *pudota* ?~ SaaN *bođu-*
- 23) Fi. *riisua* ~ SaaL *rihttijot*
- 24) Fi. *ruoko* ~ SaaL *ruohko*
- 25) Fi. *seisoa* ~ SaaN *čuozžut*
- 26) Fi. *talkoo* ?~ SaaN *duolgu*
- 27) Fi. *tauota* ~ SaaN *duovgut*
- 28) Fi. *toivoa* ?~ SaaN *doaivut*
- 29) Fi. *tora*, *torua* ~ SaaN *doarru*, *doarrut*
- 30) Fi. *torjua* ?~ SaaN *doarjut*

- 31) Fi. *ulvoa* ~ SaaN *holvut*
- 32) Fi. *uskoa* ~ SaaN *oskut*
- 33) Fi. *vannoa* ~ SaaN *vuordnut*
- 34) Fi. *vitoa* ~ SaaN *vahcut*

Loans from Finnic into Saamic

- 35) Fi. *alku* ?~ SaaN *álgu*
- 36) Fi. *ampua* ~ SaaN *ábbut*
- 37) Fi. *anoa* ?~ SaaN *átnut*
- 38) Fi. *ehto* ~ SaaN *eaktu*
- 39) Fi. *ehtoo* ?~ SaaL *iektu*
- 40) Fi. *elo* ~ SaaN *eallu*
- 41) Fi. *eno* ~ SaaN *eanu* : *edno-*
- 42) Fi. *kajota* ~ SaaN *gádjut*
- 43) Fi. *kalvoin* ~ SaaN *guolládat*, Lu *gálludahka*
- 44) Fi. *keino* ~ SaaN *geaidnu*
- 45) Fi. *koljo* ?~ SaaL *goalljo*
- 46) Fi. *mantu* ?~ SaaN *máddu*
- 47) Fi. *mulko-* ?~ SaaN *mulgut*
- 48) Fi. *rutto* ~ SaaN *rohhttu*
- 49) Fi. *sumu* ~ SaaN *sopmu*
- 50) Fi. *taju* ?~ SaaN *dádjut*
- 51) Fi. *vaimo* ~ SaaN *váibmu*

Loans from Saamic into Finnic

- 52) Fi. *aimo* ~ SaaN *áibmu*
- 53) Fi. *eno* ~ SaaN *eatnu*
- 54) Fi. *kiehtoa* ?~ SaaN *giestu*, L *giestit*
- 55) Ka. *koruo* ?~ SaaN *goarrut*
- 56) Fi. *kyylä* ?~ SaaN *govlut*
- 57) Fi. *luppo* ?~ SaaN *lahppu*
- 58) Fi. *maarto* ?~ SaaN *márdu*
- 59) Fi. *poro* ?~ SaaN *boazu*
- 60) Fi. *rouko* ?~ SaaN *roavgu*

Convergent derivatives of cognate stems

- 61) Fi. *alus* ~ SaaN *vuolus*
- 62) Fi. *kummuta* ?~ SaaN (Friis) *gobbolastet*
- 63) Fi. *lumota* ~ SaaN *lapmut*
- 64) Fi. *meno* ~ SaaN *mannu*
- 65) Fi. *näkö* ~ SaaN *niehku*
- 66) Fi. *punoa* ~ SaaN *botnit*, *botnut*
- 67) Fi. *tahtoa* ?~ SaaN *duostut*
- 68) Fi. *teko* ~ SaaN *dahku*
- 69) Fi. *tunto* ~ SaaN *dovdu*

Other parallel developments

- 70) Fi. *kalto* ?~ SaaN *guoldu*
- 71) Fi. *kalu* ?~ SaaN *gálvu*
- 72) Fi. *lahko* ?~ SaaN *luosku*
- 73) Fi. *mauruta* ?~ SaaN *mávrrut*, I *muávruđ*
- 74) Fi. *tuhto* ?~ Saa. *totko*

Additional data

- A1) Fi. *mustua* ~ SaaN *mostut*
- A2) Fi. *noitua* ~ SaaN *noaidut*
- A3) Fi. *paju* ~ SaaN *boadju*

Note: ?~ here refers to a hesitant equation in SSA.

Etymological cognates

The following Finnic-Saamic comparisons (1–9) have an initial-syllable vowel correspondence (Finnic *a* : Saami *uo* or Finnic *ä* : Saami *ā*) which excludes the possibility of borrowing between Proto-Finnic and Proto-Saami and thus indicates cognation (or a very early borrowing prior to Pre-Saami vowel changes). The Saami nouns *gáloj-*, *guottu*, *suolu* and partly (U–N) *čuolggu* also reflect a Proto-Saami **-ōj-*stem,

which, according to Sammallahti (1988: 485; 1999: 72–73), goes back to **-a/ä/i+v* in Pre-Saamic and possibly already in Proto-Uralic.

1) Fi. *kanto* ~ SaaN *guottu*

PFS reconstruction: **kantov* > Pre-Saami **kantoj*

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est	Vs	Li
----	-----	----	----	----	----	-----	----	----

S	U	P	L	N	I	Sk	K	-
---	---	---	---	---	---	----	---	---

F. *kanto* ~ Saa. **kuontōj* ‘(tree) stump; (roots of a) fallen tree’ < **kanta+v* (PU **kinta*) (cf. Aikio 2006b: 30).

2) Fi. *käly* ~ SaaN *gálojeatni*

PFS reconstruction: **käluv* > Pre-Saami **kälōj-*

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est	Vs	Li
----	-----	----	----	----	----	-----	----	----

S	U	P	L	N	I	Sk	-	-
---	---	---	---	---	---	----	---	---

F. *käly* ~ Saa. **kälōj-(eanē)* ‘sister-in-law’ < PU **käliw* (e.g. Salminen 2012: 344; **kälāw* in Sammallahti 1988: 485, 538).

3) Fi. *lastu* ~ Saal *luás’tu*

PFS reconstruction: **lastu*

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est (Vs)	‘Li
----	-----	----	----	----	----	----------	-----

-	-	-	-	-	I	Sk	K	-
---	---	---	---	---	---	----	---	---

F. *lastu* ‘chip, shaving’ ~ Saa. **luostō* ‘birch-bark container’ (F. illabial-vowel derivatives Ve. *lastē* : GEN *lastken*, Li. *lõškõz* ‘chip, splint’), cf. Fi. *lasta* ‘splint, spatula, etc.’ ~ SaaN (S P L I Sk) *luosti* ‘streak of lighter hair on the side of a reindeer’ (Koponen 1996: 90; Aikio 2009: 261).

4) Fi. *nato* ~ SaaS *nååte*

PFS reconstruction: **natov* > Pre-Saami **natoj*

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est	Vs	-
----	-----	----	----	----	----	-----	----	---

S	-	-	-	-	-	-	-	-
---	---	---	---	---	---	---	---	---

F. *nato* ‘husband’s or spouse’s sister’ ~ SaaS *nååte* ‘spouse’s younger sister’ < PS **nuotōj* (cf. *sååle* < PS **suolōj* ‘island’) < PU **nataw* (e.g. Salminen 2012: 341; **natiw* in Sammallahti 1988: 539).

5) Fi. *pato* ~ SaaN *buodđu*

PFS reconstruction: **paðo*

Distribution:

Fi - Ka - Ve - - - -

S (U) (P) (L) N I Sk K T

F. *pato* ~ Saa. **puoðō* ‘weir, dam’ < PU **paða* (or **piða*) (SSA; Sammallahti 1988: 548). (U–L only have a verbal correlate **puoðō*- (N *buodđut*) ‘stop up, dam up’.)

6) Fi. *salko* ~ SaaN *čuolgu*

PFS reconstruction: **śalko(v)*

Distribution:

Fi Ing Ka Lu - - Est Vs -

‘S ‘U P L N I - - -

F. *salko* ‘long pole, rod’ ~ Saa. **čuolkō(j)*/**čuolke* ‘pole, rod, lever’ < PU **śalka*/**śilka* (Sammallahti 1988: 549) ← PIE **ǵʰalgʰo-*/**ǵʰalgʰā* (Koivulehto 1983: 113; 2001: 238).

7) Fi. *salo* ~ SaaN *suolu*

PFS reconstruction: **salov* > Pre-Saami **saloj*

Distribution:

Fi - Ka Lu - - Est Vs -

S U P L N I Sk K T

F. *salo* ‘wilderness, deep forest’ (Fi Ka Lu), ‘patch of forest; island’ (Fi), ‘grove; mound on a bog’ (Est Vs) ~ Saa. **suolōj* ‘island’ ?← Baltic (cf. Lith. *salà* ‘island’) or both FS and Baltic from an unknown substrate language (J. Häkkinen 2009: 48; Saarikivi 2004: 204, 208).

8) Fi. *tarpoa* ~ SaaN *duorbut*

PFS reconstruction: **tarpo-*

Distribution:

Fi Ing Ka Lu Ve Vo (Est) - -

- U P L N I Sk K T

F. *tarpo-* ~ Saa. **tuorpō-* ‘drive fish into a net (with a pole)’, Fi. also ‘trample, plod’ ? ← PGerm. **staur(a)-* (SSA; LÄGLOS).

9) Fi. *vajota* ~ SaaN *vuodjut*

PFS reconstruction: **vajo-* (**vaju-*)

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs Li

S U P L N I Sk K T

F. **vajo-t(a)-*, **vajo-*, **vaju-* ~ Saa. **vuojō-* ‘sink; subside’ < **vaja+v* (cf. Fi. *vajaa* < **vajaka* ‘not full’), corresponding to md. *vajams*, Udm.

vijini, Komi *vejni* ‘sink; drown’, MsN *uj-* ‘sink’ (SSA; SKES; Kulonen 2010: 264; on the Permic and Ugric sound correspondences see Aikio 2014a: 4).

As for the following three items (10–12), borrowing in either direction can be ruled out based on the fact that the consonant correspondences are found only in cognate vocabulary (Finnic *-h-* : Saamic *-s-* / Finnic *-s-* : Saamic *-š-* / Finnic *s(i)-* : Saamic *t-*).

10) Fi. *puhua* ~ SaaN *bossut*

PFS reconstruction: **pušu-*

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs ‘Li

S U P L N I Sk K T

F. *puhu-* ~ Saa. **posō-* ‘blow’, (Fi Ka) ‘talk’ (Ka Lu Ve) ‘cast a spell’.

11) Fi. *kiskoa* ~ SaaN *gaikut*

PFS reconstruction: **kiško-*

Distribution:

Fi Ing Ka Lu <u>Ve</u> Vo Est Vs Li

S U P L N I Sk K T

F. *kisko-* (*kiska-*) ‘pull, drag, tear; rob’ ~ Saa. **keškō-* ‘pull, tear, break’.³

12) Fi. *siivo* ~ SaaN *divvut*

PFS reconstruction: **tīvo-*

Distribution:

Fi Ing Ka - - - (Est) - -

S U P L N I Sk K T

F. *siivo* ‘tidiness, order; mess; tidy, decent’, *siivota* ‘clean, tidy up’ ~ Saami **tivō-* ‘put right, repair, arrange, get ready’.

The following items (13–16) can be considered very probable cognates due to their wide distributions, as well as their matching forms and semantics.

3. Veps *kiškoida* ‘break, slit, crush’ (Zajceva & Mullonen 1972: 209).

13) Fi. *kiro* ~ SaaN *garu*

PFS reconstruction: **kiro-*

Distribution: Fi Ing Ka Lu Ve Vo (Est) (Vs) -

S U P L N I S k K T

F. *kiro* ~ Saa. **kērō* ‘swearword, curse’, F. *kiro-ta-* ~ Saa. **kērō-t-* (SaaN *garrudit*) ‘swear, curse’ < noun **kira-v* ?← verb **kira-*.

14) Fi. *kumo* ~ SaaN *gomu-*, *gopmut*

PFS reconstruction: **kumo-*

Distribution: Fi Ing Ka ‘Lu Ve Vo Est ‘Vs ‘Li

S U P L N I S k K T

F. *kumo-* (*kuma-*)⁴ ~ Saa. **komō-* ‘(upside) down; sideways’ < PU **kuma-*.

15) Fi. *kutsua* ~ SaaN *gohččut*

PFS reconstruction: **kućcu-*

Distribution: Fi Ing Ka Lu Ve Vo Est Vs Li

S U P L N I S k K T

F. **kuccu-* ~ Saa. *koččō-* ‘call, invite, name as’ ?← PBalt **kūaitija* or PIE **guotj-* (SSA).

16) Fi. *ulko-* ~ SaaN *olgu-*

PFS reconstruction: **ulko-*

Distribution: Fi Ing Ka Lu Ve Vo (Est) - Li

S U P L N I S k K T

Finnic *ulko-* and Saami **olkō-* appear in spatial adverbs, etc. denoting ‘out(side)’. Livonian *ullō* ‘(at) outside’, *uldō(st)* ‘from outside’, *ulzō* ‘to outside’ may alternatively go back to the illabial stem **ula-* (~ Komi *ilē* ‘(a)far’, *iljīn* ‘far (away)’; SSA).

4. For Veps, SSA mentions only the illabial-stem verb *kumaita* ‘overturn’. VVS, however, also has the frequentative derivative *kumejīenda* from Pervakoi village, which could, with reservations, be interpreted as a reflex of labial-stem **kumoi-*, since Kettunen records unstressed *ai* diphthongs as mostly preserved as *ai* and not *ei* in this village (cf. Tunkelo 1946: 785).

Possible cognates

17) Fi. *ilo* ?~ SaaP *alluo*

PFS reconstruction: **ilo*

Distribution:

Fi Ing Ka Lu Ve Vo (Est) Vs ‘Li

-- P L -----

Finnic *ilo* means ‘joy, fun’ in general, in Karelian also ‘funny, odd’. In Estonian and Võro-Seto, another main meaning is ‘beauty’. An uncertain cognate in Livonian, with an illabial stem vowel, is *ilā* ‘nature, character’. Pite Saami *alluo* ‘desire, inclination’ has a verbal derivative SaaP *aluotit*, L *alotit* ‘try, tempt, persuade’. The Saami words going back to PS **elō* have a very narrow distribution but phonologically match the assumed PFS and Finnic *ilo* exactly. The semantic connection between Saami ‘desire, temptation’ and Finnic ‘joy’ seems justifiable. Differences in the semantics and the phonological forms, on the other hand, point to an inherited item rather than a loan (cf. SaaN *illu* ‘joy’, which is clearly borrowed from Finnish). (Cf. Sammallahti 1998: 249.) [?Cognate]

18) Fi. *lamu* ?~ SaaN *luomus*

PFS reconstruction: **lamu*

Distribution:

Fi -----

--- L N ‘I ---

The Finnish adjective *lamu* ‘(slightly) slanted; broad, wide’ is hesitantly equated in SSA with Saami **luomō*- (N *luomus* ‘spacious (of e.g. a room)’, L *luomok* ‘even, level (of land)’). As another entry, SSA has the noun *lamu* (FiW, FiSE) ‘wide field area, plain’, (Fi) ‘hollow, depression; bog’, (Ka) ‘plain between hills’, (Ve) ‘heath’. At least the eastern occurrences of this noun are probably loans from Russian (dial.) *lom* ‘bog’ and *láma* ‘peatland meadow’ (cf. SSA). The adjectival *lamu* meaning ‘slanted’ (cf. compounds such as *lamukatto* ‘pitched roof’) should be connected to Fi. *lama* ‘laid down, leaning, slanted’, whereas *lamu* meaning ‘broad, wide’ is probably the same word as the Fi. noun *lamu* ‘wide area’. The adjectival use frequent especially in northern Finland may have been supported by analogy with Saa. *luomus*.

SaaN *luomus* has derivational correlates *luopmu* ‘ample room’ and *luomüi*, *lūpmolaga* ‘side by side’ (Nielsen) (also SaaI *luámádâs* ‘id.’ with an illabial stem vowel); the latter adverbs seem to be partial loans from Fi. *lomittain* ‘interlocked, side by side’ (from Fi. *loma* ‘gap; holiday’ → SaaN *luopmu* ‘holiday’). FiW *lamu* ‘wide field area, plain’ cannot be unambiguously connected to the Russian loanword *lamu* but may also reflect an inherited word that is cognate with Saa. **luomō*. [?Cognate]

19) Fi. *luku* ~ SaaN *lohku*

PFS reconstruction: **luku*

Distribution:

Fi Ing Ka Lu - (Vo) Est Vs Li

S U - L N I Sk K T

Finnic *luku* ‘number; account; reading’, (Est) ‘incident, story; respect’, etc. and Saami **lokō* (U L N I) ‘number; calculation’, (S) ‘reading, something to read’ are derivatives of the cognate verbs Fi. *luke-*, Saa. **loke-* (both i.a. ‘calculate; read; recite; regard as’) < PU **luki-*. The derivatives may in principle go back to a common protolanguage or be separate formations in the language groups. At least the South Saami word *lāhkoe* apparently has a relatively recent meaning corresponding to the modern sense of **loke-* ‘read text’ (cf. also U *luhkoo* ‘reading’ ← *luhkat* ‘read’ vs. *lāhkoo* ‘number’ < PS **lokō*). Considering the broad distributions, a common Finno-Saamic derivative **luku* ‘number, count’ could be assumed. [?Cognate]

20) Fi. *malo* ?~ SaaL *muolos*

PFS reconstruction: **mala*/**malo-*

Distribution:

Fi - Ka - - - Est - -

- - - L (N) I Sk K <u>T</u>

Finnic *malo*, with the meanings (Fi) ‘edge; shore; bay; fishing ground; hole (in ice)’ and (Ka) ‘shallow (water)’, as well as Est. *mala* ~ *malu* ‘sandy seashore’, reflect a Baltic loanword (cf. Lith. *malá* ‘landscape; edge’ and Latv. *mala* ‘edge; shore; region’; Nuutinen 1987; Vaba 1989). Saami **muolōs* (L *muolos* ~ *muolun*, Sk *muâlas* ‘ice-free area in a lake near the shore in springtime’, L *muolostit* ‘become free from ice’) may be connected to this, and possibly also the irregular SaaN (I) *moalus* ‘small fragments of ice on the water’, which seems to have been both phonologically and semantically blended with SaaN *moallu*

‘crumb, piece’. Ter Saami *mīlle* seems to have retained a simpler stem going back to PS **muolē* < PFS **mala*, which – together with the Estonian variant *mala* – suggests that both the Finnic and Saamic variants with a labial vowel are secondary (for the Saami derivative cf. e.g. SaaN *čalmmus* ‘hollow in bog’ ← *čalbmi* ‘eye’). – Mordvin *mala-* in adverbs (E *malaso* ‘near’, etc.) is either a common or parallel borrowing from Baltic (Grünthal 2012: 311, 322). [?Cognate]

21) Fi. *osua* ~ SaaN *oažžut*

PFS reconstruction: **onču-*

Distribution:

Fi - - - - -

S U P L N I Sk K -

Finnish *osua* ‘hit (a target)’ and Saami **oančō-* ‘obtain, get hold of; get to do, may’ have a common semantic component of ‘catching something’. On the other hand, Fi. *osua* looks like a derivation from *osa* ‘part, share; destiny, luck’, and SaaN *oažžut* from *oažži* ‘meat’, both of which go back to FS **onča* (cf. SSA; Kulonen 2010: 265). The original meaning of **onča-* could be ‘a piece of meat’ (attested in SE dialects of Finnish besides Saami), leading to a derivation **onču-* ‘get one’s share of meat’. The consonantism does not allow a loan interpretation between Saami and Finnic, but the limited Finnic distribution might indicate Saami contact influence; most Finnic languages use derivations of the type **osa-(i)ta-* (SSA). (Eastern Finnic derivatives with *-u-*, Ka. *osuttoa*, Ve. *ozutada* ‘point, show’, etc. are variants of Fi. *osoittaa* ‘id.’ (cf. Ka. *kirjuttoa* ~ Fi. *kirjoittaa* ‘write’) and not directly connected with Fi. *osua*.) [?Cognate]

22) Fi. *pudota* ?~ SaaN *bođu-*

PFS reconstruction: **puđo-*

Distribution:

Fi Ing Ka ‘Lu Ve Vo Est Vs Li

‘S U P L (N) I Sk K T

Saami adverbs with the root **pođō-* (SaaN *bođuid*, *bođus*; U–T) ‘loose, separated’ also have a verbal correlate SaaN *bođ’đet* ‘cut to pieces, separate’ (S–N). Finnic verbs with **puto-* meaning ‘fall’ have illabial derivational correlates such as Est. *pudene-* ‘crumble, fall off’, Fi. *pudista-* ‘shake, shake off’. Both the Finnic and Saami stems go back to PU **puđ’a-* ‘hit, split, break’ with cognates in Mari, Udmurt, Mansi and Samoyed (Aikio 2006a: 22–23). Since there are no direct

reflexes of the old simple stem **puδ'a-* in Saami or Finnic, it seems possible to assume that a labialized stem had already developed in the Finno-Saamic protolanguage, although the labial vowel appears only in verbal derivatives in Finnic and noun-based adverbs in Saami. [?Cognate]

23) Fi. *riisua* ~ SaaL *rihtjtjot*

PFS reconstruction: **rĩ(ć)ću-*

Distribution:

Fi Ing Ka 'Lu Ve Vo Est Vs Li

S - - L - - Sk K -

Finnic *riisu-* has a stem variant with an affricate (Ka. *riiččie*; FiE, Lu), with the meanings of the Finnic variants ranging from 'take off clothes; take apart' to 'rob'. The primary meanings of Saa. **riččō-* are 'struggle, strive' (S L) and 'open (quickly); lift (a cover)' (Sk, K). SaaN (L) *rihcu-* 'naked' is, considering the meaning and the consonantism, clearly a loan from Finnic.

Both the Finnic and Saami stems go back to FS **rĩććV-*. The Karelian verb has retained the affricate, whereas in other Finnic varieties the affricate has become shortened after the long vowel and then undergone a regular change into *s* (cf. Kallio 2007: 241). The Karelian variant does not contain a labial vowel, but since the Finnic stem vowel *i* is always secondary, this variant can be considered a later or parallel derivative of an original FS form **rĩćću-*. On the other hand, reconstructing such a heavy initial syllable (C \bar{V} C/CVCC) at the Finno-Saamic stage seems doubtful, so perhaps we should presume FS **rĩću-* with a secondary gemination of the affricate, and possibly early borrowing of the word from Finnic into Saami. [?Cognate]

24) Fi. *ruoko* ~ SaaL *ruohko*

PFS reconstruction: **rōko*

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs Li

'S U P L(N) I Sk K T

Finnic *ruoko* 'common reed; straw' and Saami **ruokō* 'reed (Phragmites)' form an impeccable etymological comparison in terms of phonology, semantics and distribution. That said, an old borrowing from Finnic into Saami can not be fully ruled out (cf. SSA). The word is either a Germanic (< Early PGerm. *brōko-* or PGerm. **brōka-* >

German *Bruch* ‘bog’) or Proto-Baltic loan (cf. Old Prussian *drogis* ‘reed’) (SSA). [?Cognate]

25) Fi. *seisoa* ~ SaaN *čuožžut*

PFS reconstruction: **šaṇso-* ~ Fi. **šaṇša-*

Distribution:

Fi Ing Ka Lu Ve Vo ‘Est ‘Vs -

‘S U P L (N) I S k K T

Finnic *seiso-* ~ Est. *seisa-* ~ Vs. *saisa-* and Saa. **čuoñčō-* ‘stand; stay’ belong to a Uralic word family going back to PU **saṇša-/sāṇšä-* (SSA: **šaṇća-*). The Mari, Komi and Samoyed cognates derive from the front-vocalic variant **sāṇšä-* (Aikio 2002: 30–31), while Saami and Mordvin suggest the PFM reconstruction **šaṇša-* with the initial **s* assimilated by the following palatalized consonants. The unexpected *-ei-* instead of *-ai-* in Finnic apart from Võro-Seto seems to reflect the tendency found in words such as Fi. *heinä*, *seinä*, *seiväs* (Vs. *hain*, *sain*, *saivas*). Since the southern Finnic languages have the stem vowel *-a* in this word, a labial vowel can be reconstructed for the Finno-Saamic proto-form only supposing that an illabial form was also preserved as a dialectal or functional variant. [?Cognate]

26) Fi. *talkoo* ? ~ SaaN *duolgu*

PFS reconstruction: **talko-*

Distribution:

Fi Ing Ka - Ve Vo Est Vs Li

- U - L <u>N</u> - - - -

Fi. *talko* ~ *talkos*, usually plural *talkoot* ‘voluntary work event’ is a Baltic loanword (< PBalt. **talkōs* PL ‘voluntary work and workers’; SSA). Saami **tuolkō* ‘bribe’ (U *dual’goo*, L *duolggo*, N (Torne) *duolgu* (SSSg)) can be etymologically connected if a semantic development from ‘serving of food (for voluntary workers)’ to ‘bribe’ is assumed (SSA). [?Cognate]

27) Fi. *tauota* ~ SaaN *duovgut*

PFS reconstruction: **tavko-*

Distribution:

Fi ‘Ing - - - ‘Vo (‘Est) - -

- - P - N - - - -

Fi. *tauota* (: *taukoa-*) ‘stop, cease’ has nominal correlates *tauko* ‘pause’ and (dial.) *taukea* ‘slow, quiet; meek’; there is also a verb Vo. *taugeta*, Ing. *tauvveta* ‘die (mostly of animals)’ showing an illabial stem. These

and the Saami verb **tuovkō-* ‘run dry (of milk); be weaned (of a reindeer calf); be timid’ make a semantically and phonologically acceptable comparison despite the narrow distribution in both language groups. Still, it is quite possible that the Finnish verb with *-o-* is a derivative of the noun *tauko* (deverbal < **tauka-v?*). The putative Komi and Udmurt cognate *dugdini* ‘cease, stop’ (SSA; Sammallahti 1988: 554) is phonologically incompatible with the Finnic and Saami items. [?Cognate]

28) Fi. *toivoa* ?~ SaaN *doaivut*

PFS reconstruction: **tojvo-*

Distribution:

Fi Ing Ka Lu Ve (Vo) Est Vs Li

S U P L N I S k - -

Finnic *toivo-* ‘hope; wish; promise; foretell; think’ and Saami **toajvō-* ‘hope; think, suppose’⁵ have a noun with an identical stem in both language groups: Fi. *toivo* ‘hope, belief, etc.’ (Ka) and SaaN *doaivu* ‘hope, expectation’ (P L I). Considering the narrow distribution of the nouns, the verbal use is probably older. Saami **toajvō-* may be an early loan from Finnic, e.g. Kulonen (2010: 265) and Sammallahti (1998: 129) regard this as more likely than cognation. Koivulehto (2003) has proposed an Aryan loan etymology for the Finnic word based on its sense ‘to foretell’ (← Proto-Aryan **dāiva-* > Sanskrit *daiva-* ‘divine, destined, etc.’, *daiva-jña-* ‘prophet’). [?Cognate]

29) Fi. *tora*, *torua* ~ SaaN *doarru*, *doarrut*

PFS reconstruction: **toru-* (**tora-*)

Distribution:

Fi Ing ‘Ka ‘Lu ‘Ve Vo Est Vs -

S U P L N I S k K T

The Finnic noun *tora* (~ Est. (Wied) *toru*, *tõru*) and Saami **toarō-* ‘war, fight; quarrel’ have verbal correlates in *torua* (Fi Ing Vo) ‘scold’, (Fi dial.) ‘quarrel’ and Saa **toarō-* ‘fight’. Cognates have been suggested in Mari (E *torlem* ‘scold’), Hungarian (*dorgál* ‘id.’) and Samoyedic. Kulonen (2010: 212–214) maintains that **toro-* and **torjo-* (see below) belong to the same, originally expressive word family. [?Cognate]

5. Additionally, SaaK *tjvvēd*, T *tjvvad* ‘want, intend to’ may belong here, if we suppose that an irregular phonetic simplification has taken place, possibly due to use as an unstressed auxiliary verb (most examples in KKLS p. 598 involve such constructions).

30) Fi. *torjua* ?~ SaaN *doarjut*

PFS reconstruction: **torju-*

Distribution:

Fi - - - - Est (Vs) -

<u>S</u> <u>U</u> P L N I Sk K -

The Finnic word means ‘repulse, drive away’, and the Saami word ‘support, sustain; lean (against)’. Mordvin (E) *tuřems* ~ *t’uřems* ‘fight’ could be a further cognate (though lacking a derivational labial element). SSA connects the words in question with Fi. *tora* ‘quarrel’ and *torua* ‘scold’, and Kulonen (2010: 212–214) explains the stem variation (*-r-* ~ *-rj-*) through expressivity. The phonemic shapes of Finnic **torju-* and Saami **toarjō-* could represent either old cognates or loaning from one language group into another, but the Mordvin cognate suggests a relatively old age for the word. Further, as the semantics of the Saami and Finnic words are connectable but not too similar, a common heritage seems more probable. The distribution in Finnic is quite narrow, but since it covers all dialect areas of (North) Estonian and mainly the southwestern dialects of Finnish, borrowing from Saami seems unlikely. [?Cognate]

31) Fi. *ulvoa* ~ SaaN *holvut*

PFS reconstruction: **ulvo-*

Distribution:

Fi Ing Ka Lu ‘ <u>Ve</u> Vo Est (Vs) Li

‘ <u>S</u> <u>U</u> P L N I Sk K T

The eastern Saami cognates of SaaN *holvut* ‘howl, wail’ lack the initial /h/ (I *olvod*, K *ålvvad*) and can thus be derived from PS **olvō-* and PFS **ulvo-* > Fi. *ulvo-* ‘id’. Sound variation is typical of onomatopoetic words, and the Proto-Saami word-initial /h/ has clearly had expressive potential as a new phoneme (cf. Olthuis 2002: 287). Instead of a cognate, the Saami word may also be an early loan from Finnic. Note that the westernmost Saami languages point to PS *(h) *u-* instead of *(h) *o-* (S (h) *ulvedh*, U *hullvuot*, P *hul’vuot*), and an il-labial second-syllable vowel is found in the western Saami and eastern Finnic periphery (SaaS (h) *ulvedh* < PS *(h) *ulvē-*, Ve. *uuvata*). [?Cognate]

32) Fi. *uskoa* ~ SaaN *oskut*

PFS reconstruction: **usko-*

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs Li

- - ‘P L N I Sk K -

Finnic *usko-* ‘believe, trust’ and Saami **oskō-* ‘believe, suppose’ have been compared to Permian (Komi *eski-*, Udm. *oski-*) and Khanty (E *öyäl-*, S *ewät-*) words with identical meanings, which could be reconstructed as PU **iskä-* or **iski-* (based on Permian or Khanty, respectively). It has been proposed that the initial labial vowel in Finnic and Saamic is a result of assimilation to the second-syllable labial continuative suffix (SSA) or nominal derivative suffix (**iske-w-* > **isko* > **usko*; Saarikivi 2010: 255–256). This explanation is somewhat problematic, since it presupposes an irregular assimilation of the initial vowel. The Germanic loan etymology proposed by Koivulehto (1989: 184; < PGerm. **wunskā* ~ **wunsko-* ‘desire, wish, hope’) is phonologically more convincing. Either way, considering the distributions, the Saami word may be either a cognate (a common Finno-Saamic loanword) or a loan from Finnic. [?Cognate]

33) Fi. *vannoa* ~ SaaN *vuordnut*

PFS reconstruction: **vaðno-/vatno-* (Fi. **vanno-*, Saa. **varno-*)

Distribution:

Fi Ing Ka - - Vo Est Vs Li

S U P L N I Sk ‘K -

Both Finnic *vanno-* and Saami **vuornō-* have the basic meaning ‘swear, vow, assure’; additional senses include (FiSW, Est, Li) ‘swear, damn’ and (SaaP, L) ‘refuse, deny’. The initial-syllable vowel correspondence (Fi. *a*, Saa. *uo*) is consistent with that of old inherited vocabulary, but the consonant center (Finnic *-nn-*, Saami **-rn-*) seems slightly irregular. Both the Finnic and Saamic forms can, however, be derived from FS **-ðn-* or **-tn-*, if we assume that 1) the initial component of Pre-Saami **-tn-* was spirantized in PS like the plosive in other plosive-sonorant clusters (cf. Korhonen 1981: 173–174) and that 2) PS **-ðn-* was dissimilated into **-rn-* for clearer phonetic contrast.⁶ The PFS form **vatno-* would be compatible with Koivulehto’s Pre-Germanic loan etymology (< PreGerm. **wak^wna-* or **wak^wnja-*; LÄGLOS s.v. *vannoa*). [?Cognate]

6. The more general sound law postulated by Sammallahti (1998: 191), **t* > **r* before a sonorant consonant (*n*, *v*, *j*), lacks feasible examples for clusters other than **-tn-*, as noted by Aikio (2009: 125).

34) Fi. *vitoe* ~ SaaN *vahcut*

PFS reconstruction: **vičo-*

Distribution:

Fi Ing Ka Lu Ve Vo (Est) - -

S - - L N I Sk K -

Finnic *vito-* ‘scutch, purify flax; beat’ and Saami **večō-* ‘scrape, scrub; (N) work quickly and energetically’ both mean some kind of work involving back and forth movement and can be reconstructed to FS **vičo-*. Another possibility is that Fi. *vitoe* is cognate with Saami **veđō-* (SaaN *fadđut*) ‘beat, lash, slap’; this might even make a semantically better match. Saami **veđō-* < PU **wiđi-* has cognates related to ‘beating’ and ‘killing’ in the Permic and Ugric languages (Aikio 2013a: 165–166). Phonologically, a borrowing of either Saami **večō-* or **veđō-* into Finnic *vito-* is not impossible, but from the semantic point of view it seems unlikely. [?Cognate]

Loans from Finnic into Saamic

35) Fi. *alku* ?~ SaaN *álgu*

PFS reconstruction: F: **alku*, Saa: ?**älko*

Distribution:

Fi Ing Ka - Ve Vo Est (Vs) -

S U <u>P</u> L N I Sk A T

Finnic *alku* ‘beginning’ (Est. only near the coastal area; the wide-spread adverb *algul* ‘in the beginning’ (strong grade!) possibly influenced by another derivative *algus* ‘beginning’ with the suffix *-us*) and Saami **älkō* ‘beginning; origin’ can be analyzed as noun derivatives of the corresponding verbs Fi. *alka-* ‘begin’ (Fi–Est) and Saa. **älkē-* (SaaN *álgit*; S–T) ‘begin; become’. The irregular initial-syllable vowel correspondence (Saa. **ā* : Fi. *a*) shows that the Saami verb is a loan from Finnic (cf. Korhonen 1981: 91; Sammallahti 1998: 228); the regular Saami cognate of Fi. *alka-* is Saa. **vuolkē-* (SaaN *vuolgit*; S–T) ‘go (out), leave, start moving’ (unless Saa. **vuolkē-* is instead cognate with mdE *valgoms* ‘descend’, Fi. *valka-ma* ‘boat shore’, etc.; cf. Sammallahti 1998: 268). Thus, Saami **älkō* is either a direct loan from Finnic or a Saami derivative of the loan verb **älkē-*. [Loan F > Saa]

36) Fi. *ampua* ~ SaaN *ábbut*

PFS reconstruction: F: **ampu-*, Saa: *?*āmpo-*

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est	-	-
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S	U	PL	N	I	Sk	K	-
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The Finnic verb *ampua* has the meanings ‘shoot; sting; hurtle; attack (of a disease)’. Estonian has only a noun correlate *amb* : GEN *ammu* ‘bow’. Saami (N) *ábbut* means ‘boil over, flood’.

The proposed Udmurt cognate *įbi-* ‘shoot, hit’ would go back to PFP **umpa-*, and, according to Kulonen (2010: 200–202), the Finnic *ampu-* ‘shoot’ could be a blend of **umpa-* and another verb stem **am(m)u-* ~ ***ampu-* ‘get scooped (up)’ (cf. Fi. (Agr; Ing Ka Lu Ve) *ammultaa*, Vs. *ammutama*, standard Fi. *ammentaa* ‘scoop’). This kind of blending seems rather improbable due to the differing semantics, though. It appears instead that both F. *ampu-* (< **ampi-* + reflexive suffix?) and Udm. *įbi-* could be regular reflexes of PU **įmpi-* due to secondary illabialization of Proto-Permic **ũ* in Udmurt (cf. e.g. PU **wanča* ‘root’ > PPermic **vũžĩ* > Komi *vuž*, Udm. *vįžj*; Aikio 2002: 37; see also E. Itkonen 1954b: 303, 317).

The Saami stem **āmpō-* cannot be a cognate of Finnic *ampu-* due to the vowel of the initial syllable; instead, it could be a loan from Finnic (cf. Aikio 2009: 54 footnote). The basic semantics of Finnic *ampua* is rather far from that of the Saami verb, and therefore a more appealing source of borrowing would be the *ammu-* word family denoting ‘scooping’, but apparently there are no traces of the required strong-grade stem variant **ampu-* with this meaning in any Finnic language, so the possibility remains hypothetical.⁷ The verb *ampua* ‘shoot’ may have served as a loan source only if its original semantics was automative-reflexive like in the meaning ‘hurtle’, attested in Finnish dialects (cf. Hakulinen 1979: 270); note that the verb is sometimes also used to denote a sudden eruption of boiling liquid, etc. (e.g. *se [kahvi] ampuu taas pitkil laattiaa* ‘it (the coffee) is boiling over onto the floor again’; SMS 1: 357). [*?Loan F > Saa*]

7. As the geminate nasals *-mm-* and *-nn-* are usually not taken to be part of the phonological system of Pre-Saami and early Proto-Saami, it is also plausible that PF **-mm-* could have been substituted with PS **-mp-* at such an early stage, although it is not clear whether Proto-Finnic had such geminates at that time either. As a phonological parallel, we can take SaaN *gáppus* ‘creepy, uncanny’ < PS **kāmpōs* ← Fi. *kammo* ‘dread, horror’, *kammottava* ‘dreadful, eerie’, etc., though this may be a more recent loan, considering the SaaN-only distribution.

37) Fi. *anoa* ?~ SaaN *átnut*

PFS reconstruction: F: **ano-*, Saa: ?**äno-*

Distribution:

Fi - (Ka) - - (Vo) (Est) - -

S U P L N I Sk K T

The Finnic and Saami verbs both mean ‘beg, plead’. The vowel correspondence (Finnic *a* – Saami *á*) is indicative of a loanword, and the distributions would suggest borrowing from Saami into Finnic, as the Finnic distribution is limited to Finnish and to folklore texts in White Sea Karelian, while the sporadic occurrences in Vot and North-East Estonian are probably loans from Finnish. There is, however, reason to suspect that the word has spread from SW Finnish into other Finnish dialects with the support of Biblical language: the SW dialects seem to show a more diverse use of the word, and there are no attestations from the areally detached dialects of Vermland and Ingria. Borrowing and spreading of the word into Saami varieties may also have taken place through Biblical language: in North Saami, the verb *átnut* seems to be most frequently and diversely used in religious texts; in other genres it is almost exclusively used in the phrase *átnut ándagas-sii* ‘forgive’ (SIKOR). Inari, Lule and South Saami texts show similar tendencies. (The spread of the word into the Russian Saami varieties cannot, however, be explained by religious language, so some other kind of lexical diffusion must instead be supposed.) The direction of borrowing is corroborated insofar as Fi. *anoa* is derived from the former stem **ana-*, which would be cognate with Mordvin *anams* ‘want, beg, plead’ (cf. SSA). Sporadic attestations of the infinitive form *ano-ja* (Uukuniemi, DMA; Jämsä, Rapola 1966: 473) would also point to **anoi-* < **ana-j-*, unless these are analogical adaptations. There is a possible Finnic derivational correlate with an *-a-* stem, *anastaa* ‘steal, seize’ (Fi Ka Ve), but this is more probably a loan from Saami **ānēstē-* ‘id.’ (Aikio 2009: 59). [?Loan F > Saa (?Saa > F)]

38) Fi. *ehto* ~ SaaN *eaktu*

PFS reconstruction: **ekto*, F. **ešto*

Distribution:

Fi (Ing) Ka - - (Vo) - - -

- - P L N I Sk - -

Saami **eaktō* has the meanings ‘free choice, liberty; willfulness’, (N I) ‘condition’ and its illative form serves as a postposition *ektui*

‘with respect to, compared to’ in North Saami. Finnish-Karelian *ehto* means ‘precondition; alternative; free choice; relation’ and occurs in constructions such as Fi. *olla ehdolla* ‘be on offer, run for’ and Ka. *minun ehtoh* ‘as fast as I’. Ingrian has only the derivative *ehtoisa* ‘good, generous’ in folk poetry; Note also *ehtoiza*, *ehtonõ*, *ehtoin*, *ehto* ‘good, dear’ probably as loans from Finnish or Ingrian (VKSr: 184).

Fi. *ehto* has been analyzed as a derivative of the verb *ehtää*, which occurs only in old dictionaries and is in modern language represented by the derivatives *ehtiä* and *eh(d)ättää* ‘reach, be in time, have time’ (Kettunen 1959: 219–221). According to Koivulehto (1989: 175–179), the verb is a loan from Pre-Baltic **jeh₁g^u-jo/je-* (> Lith. *jėgti*) ‘be able to’. SSA rejects these explanations and regards Fi. *ehto* and Saa. **eaktō* as cognates, but the geographical distribution would instead point to a more recent development. Considering that the Saami word has no illabial-vowel correlates but Fi. *ehto* can be rather credibly connected to the *ehtä*-stem words assuming an original meaning related to ‘possibility, ability’, Saami **eaktō* is probably a loan from Finnic (cf. Korhonen 1981: 104, 173). The Finnic verbs in question go back to PFP **ešti-/eštä-*, which is reflected in SaaN *astat* ‘have time, be in time’ and Mari *äste-* ‘make, do’. Komi *eštini* ‘complete; have time; be able’ is probably an early loan from Finnic. [Loan F > Saa]

39) Fi. *ehtoo* ?~ SaaL *iektu*

PFS reconstruction: F: **ektako*, Saa: ?

Distribution:

FiW - - - Ve Vo Est (Vs) Li

‘S U ‘P L ‘N ‘I Sk ‘K

Fi. *ehtoo*, *ehtava*, *ehtavo*, Vo. *ęhtago*, Ve. *ehtķeine*, etc. ‘evening’ go back to PF **ehtako*, which is supposedly a derivative of *ehta* ~ *ehtä* ‘evening; evening gathering’ (FiE Ka Lu Ve Est) (SSA). Sammallahti (1998: 249) derives this, as well as North Saami *ikte* (< PS **jiektē*) ‘yesterday’, from the FS stem **ektä/*ekti*. The vocalism of the Saami item, however, is not regular with regard to either of the reconstructions, and there is irregular vowel variation throughout the language area: the forms go back to PS **juktā-* (S U) ~ **juktō* (U) ~ **jiektu* (P L) ~ **jiektē* (N In) ~ **joktā-* (Sk A) ~ **jiektā-* (U Kd T). Judging from this, the word has probably been borrowed from Finnic and has spread secondarily through the Saami speaking area. [Loan F > Saa]

40) Fi. *elo* ~ SaaN *eallu*

PFS reconstruction: **elo*

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs Li

S U P L N I Sk K T

The core meaning of Finnic *elo* ‘life’, attested in all Finnic languages, is a semantically straightforward nominalization of the verb *elä-* ‘live’. Secondary meanings include ‘livelihood, earnings’ (Ka), ‘crops; food; cattle’ (Fi), ‘possessions, goods’ (Fi Ka Lu Ve), and ‘place of living, house’ (Est Vs Li). Saami **ealō-* has the meanings ‘herd of reindeer, flock of sheep’ and ‘fortune, money, goods’, but generally nothing more closely related to the basic verb **ealē-* < PFS **elä-* ‘live’. Although formally the Saami word could go back to a common Finno-Saamic proto-form **elo*, the quite specific semantics matching some of those attested in northern Finnic would instead indicate borrowing from Finnic. [?Loan F > Saa]

41) Fi. *eno* ~ SaaN *eanu* : *edno-*

PFS reconstruction: F: **?enōj*, Saa: **enōj* ? < **enōv*

Distribution:

Fi Ing - - - Vo Est Vs -

S U P L N I Sk A T

F. *eno* ‘maternal uncle’ (Fi. dial. and Ing. *enoi*, Vo. Est. Vs. secondarily labialized *ono*, *onu*, etc. ‘uncle’) goes back to PF **enoi* and SaaN *eanu* ‘maternal uncle’, etc. to PS **eanōj*. Since there are no other possible Saami-Finnic cognate items reconstruable to PFS suffixal **-oj*, we must be dealing with a loan or parallel development. Sammallahti (1999: 73) considers the Saami word a regular development from Pre-Saami **enōv* < **enā-v* (from **enā* ‘big’) and the Finnic variant with *-oi* a secondary adaptation to the *-oi* diminutive type. It is unclear whether this kind of denominal noun-building suffix **-v* can be reconstructed; a scheme involving less hypothetical morphological developments would be that PF **enoi* is formed from **enā* with the deminutive suffix *-oi* (cf. Fi. *emo(i)* ← *emā* ‘mother’)⁸ and that the Saami item is a borrowing from Finnic. [?Loan F > Saa]

8. The *-oi* suffix has been abstracted from stems with **a* + a **-j* diminutive suffix that has undergone the regular Proto-Finnic development **-aj* > **-oj*; note that a **-j* derivative from an **ä* stem would regularly develop into **-äj* > **-ej/-ij* > **-i* (see e.g. Kallio 2012).

42) Fi. *kajota* ~ SaaN *gádjut*PFS reconstruction: F: **kajo-*, Saa: *?*käjo-*Distribution:

Fi - - - - - 'Vs -

- <u>U</u> P L N I Sk <u>K</u> -

The Finnish verb *kajota* (: *kajo-a-*) has the meanings 'touch, interfere (with), affect; take into account' and derivational correlates *kajottu-a*, *ka(j)ettu-a* 'affect, interfere', Võro-Seto *ka(j)e-* 'look; explore (with one's hands), inspect'. Fi. *kaitse-* 'tend, guard, take care of' (Ka Ve Vo Est Li) is also possibly derived from the same *kaje-* stem (< **kajicce-*, cf. Ka. *kaičen* ~ *kajičen* PRS.1SG). Saami **kājō-* 'save, liberate, help', (U) 'heal' seems to have no parallel derivatives showing an illabial stem vowel. This fact and the initial-syllable vowel correspondence (Fi. *a* : Saa. *ā*) suggest that the Saami word has been borrowed from Finnic or some other source; F. *kajo-* would be a phonologically adequate source for the borrowing, but the semantics of the Saami item corresponds more closely to the Finnic derivative *kaitse-*. The simple Finnic stem **kaje-* has a possible cognate in Ob-Ugric (cf. SSA: MsS *kāj-* 'touch, hit (a target)', etc; the corresponding Khanty word KhE *kaj-* 'hit (a target), collide' is a loan from (Proto-)Mansi, judging from the vocalism). [?Loan F > Saa]

43) Fi. *kalvoin* ~ SaaN *guollqadat*, Lu *gálludahka*PFS reconstruction: **kalvoma/kalama*, etc., Saa. **kalantik/*kälä-?*Distribution:

Fi Ing Ka Lu Ve Vo Est - 'Li

- - - L 'N 'I Sk K T

The Finnic and Saami words in question denote a tool, a 'small piece of wood used in making the meshes of a net'. Finnic variants include (Fi) *kalvoin*, *kalvuin*, *kalvin*, *kalpio*, (Fi Ing) *kalvain*, *kalvasin*, (Fi Ing Ka) *kalve(h)*, (Fi) *kalvi*, (Ing Vo) *kaluvi*, (Ka) *kaluin*, (Lu Ve) *kalud'im*, (Fi) *kalvos*, *kalvostikku*, *kalvosin*, *kalvusin*, (Est) *kalasi*, *kalusi*, *kaladi*, *kalts*, and (Li) *kalāndər*, *kal'im*. North Saami has a word with an etymologically corresponding stem, *guollqadat* (PS **kuolāntek*), while other Saami varieties (L–T) have words reflecting PS **kālāntek*. The Finnic word family is difficult to analyze due to its great morphological and stem variation, but one could suppose that the original word was derived from *kala* 'fish' as e.g. **kalo(itt)in* (> Li *kal'im*, Ve *kalud'im*, Ka *kaluin*) ~ **kalattin* (> Est (Saaremaa) *kaladi*) 'fish model, i.e. a tool defining the

size of fish the net catches'. PS **kālāntek* looks like a loan from Finnic. SaaN *guolladat* might in principle be an old cognate corresponding to an unattested Finnic variant **kalantek*, but since other Saami varieties have **kālāntek*, the North Saami variant is probably a recent product of association with the word *guolli* 'fish'. The second-syllable labial vowel in SaaL *gálludahka* is a local variant possibly influenced by the Finnic originals, although in principle the Sk–T items could also go back to PS **källō-* (cf. YSS 44–45). [Loan F > Saa]

44) Fi. *keino* ~ SaaN *geaidnu*

PFS reconstruction: F. *?*kājno/kajno*, Saa. **kejno*

Distribution:

Fi Ing Ka - - - - -

S U P L N I Sk K T

F. *keino* 'measure, means, way' and Saa **keajnō* 'way, path'; (N I) 'means'; (SK–T) '(place of a) winterway' have been derived from PFS **kejno* by SSA and e.g. Sammallahti (1998: 243). However, since Proto-Finnic has seemingly undergone the regular initial-syllable vowel change **ej* > **ii* (see Petri Kallio, this volume), the sound correspondence is not regular, and the Saami item is more probably a loan from Finnic. On distributional grounds, a reverse direction of borrowing might also be considered (supported by the more concrete semantics of the Saami word). The Finnic word, however, has a possible Proto-Germanic loan etymology (PGerm. **gainō* 'opening'(?); Koivulehto 1995: 99 – for the vowel development, cf. e.g. Fi. *heimo* 'family, tribe' ~ Li. *aim* < PF **haimo*). Alternatively, Fi. *keino* < Early PF **kājno* might represent the PFM stem **kāje* (> MdE *ki* 'way', SaaL *giedja* 'sleigh or ski track' (S I Sk K T); cf. Sammallahti 1998: 122; Bergsland 1964: 246), but the assumed suffix *-no* is not generally known in Finnic or Saamic vocabulary (cf. Hahmo 1994b).⁹ [?Loan F > Saa]

9. Note, though, that there seems to have been a denominal derivative suffix *-na* that was productive at least in some phase of Proto-Finnic, cf. e.g. Fi. *sarana* 'hinge', *pähkinä* 'nut' (Hahmo 1994a). The apparent suffix *-no* in some place names such as *Parkano*, *Joutseno* does not reflect an actual suffix but instead has varying back-grounds (cf. SPnk s.v. *Parkano*, *Joutseno*).

45) Fi. *koljo* ?~ SaaL *goalljo*PFS reconstruction: **koljo*Distribution:

Fi - Ka - - - Est Vs -

- - - L - - - - -

Finnish *koljo* ~ *kolja* ~ *kolju* ~ *koljumi* ‘giant; devil; spirit causing diseases; clumpy object’ can be equated to Karelian (folklore) *Koljoi*, *Koljolainen* ‘mythical creature’ and Estonian *koll* (gen. *kolli* ~ *kollu*) ‘ghost, bogey; louse’. Putative cognates meaning ‘evil spirit’, ‘disease’, etc. in Permic and Mansi (SSA) are connected to Proto-Samoyedic **kajkə* ‘spirit, gid; idol’ by Aikio (2002: 13–15), while Finnic *koljo* is considered a loan from Pre-Germanic **koljā*- > Proto-Germ. **haljō*- ‘the Underworld’ (*contra* LÄGLOS s.v. *kolja*). Considering its sound variation and very limited distribution, Lule Saami *goallja* ~ *goalljo* ~ *goajllo* ‘tall, straight pine-tree; dry heath with sparse forest’ (LuLW s.v. *kål’ja*, *kål’lō*) is probably a loan from Finnish *kolja* ~ *koljo* or, because of the differing semantics, a word of completely different origin. [?Loan F > Saa (?Parallel development)]

46) Fi. *mantu* ?~ SaaN *máddu*PFS reconstruction: F: **mantu*, Saa: ?**mānto*Distribution:

Fi - Ka - - - - -

S U P L N (I) Sk A -

Distribution: Fi - Ka - - - - - S U P L N (I) Sk A -
 Finnish *mantu* ‘(hard) ground, soil, terrain; house and lands’ and Saami **māntō* (S–N) ‘origin, root, family, earliest ancestor’,¹⁰ (Sk A) ‘ground, soil’ are equated by SSA with the remark “apparently an old Finnic loan”. The initial-syllable vowel indicates that SaaN *máddu* and *máttar* ‘lower part of something; ancestor’ (S L I Sk) are indeed old Finnic loans from *mantu* and *manner* (: *mantere*-) ‘land’ (Fi Ing Ka Lu Est), respectively. The related Saami words SaaN *máddi* ‘south; inland’ (I) and *mátta* (: *máddaga*) ‘bottom part, base’ (S–K) might be loans from the assumed Finnic base word **manta* and its derivative **mantek* or later Saami derivatives based on *máddu* and *máttar* (cf. E. Itkonen 1960: 139). [Loan F > Saa]

10. Additional cognate to SSA: SaaP *maddū* ‘geschlecht, stamm; ursprung’ (Halász 1896: 65); SaaL *lääskimáddu* ‘stinkfaul (“Ursprung des Faulen”)’ (InLW: 114) is rather to be analyzed as a folk-etymological adaptation of Fi. *laiskamato* ‘lazybones (“lazy-worm”)’.

47) Fi. *mulko*-?~ SaaN *mulgut*

PFS reconstruction: F: **mulko*-, Saa: **mülko*-

Distribution:

Fi - 'Ka - - - - -

- - - - N I Sk K -

Fi. *mulkoilla* and SaaN *mulgut* 'stare, scowl' (also Fi. *mulko-silmä* 'round staring eye') cannot be regular cognates due to the initial-syllable vowels (*u* : *u*). As the Finnic word has variants with a more primary stem vowel *-a* (e.g. Fi. (Ganander) *mulkailla*, Ka. *mul'ata*) and connected expressive words such as Fi. *mulkaista* 'scowl (briefly)', *muljauttaa* 'roll (one's eyes), etc.', it is likely that the Saami word is a Finnish loan (cf. also Aikio 2007: 45). [Loan F > Saa]

48) Fi. *rutto* ~ SaaN *rohttu*

PFS reconstruction: **rutto*

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs -

- - P L N I - - -

Finnic *rutto* has the meanings 'quick, busy' (all varieties except western Finnish), 'plague' (Fi) and 'quick-tempered; abrupt' (Ka). Saami **rottō* also means 'quick' (P L) or 'plague' (N I). It is possible to reconstruct a Saami-Finnic proto-form, but a loan from Finnic is suggested by the narrow Saami distribution and especially the North and Inari Saami meaning 'plague', which is clearly secondary in Finnish (short for *rutto-tauti* 'quick(ly spreading and killing) disease'). [?Loan F > Saa]

49) Fi. *sumu* ~ SaaN *sopmu*

PFS reconstruction: **sumu*

Distribution:

Fi Ing Ka (Lu Ve Vo Est Vs) -

- - - 'L N I Sk K -

Finnic *sumu* 'fog' exists as such only in Finnish, Ingrian and Karelian. Karelian, Ludic, Veps and some Finnish dialects have a derivative with **-ek*: Ka. Lu. *sume*, Ve. *sumeg* 'drizzle, fog'; Veps also has derivatives with a second-syllable *o*: *sumosine* 'foggy', *sumotada* 'to drizzle'. Estonian *summutada* 'smother, deaden, dampen' and *sumbuda* 'be smothered' may belong to the same word family, but here the *-u* stem vowel is probably a reflexive-automative suffix. The supposed Mordvinic cognate MdE *suv* 'fog' is phonologically irregular; the expected shape would be ***som*. The Saami words in question (N *sopmu*

‘fog’, etc.) go back to the PS labial-vowel stem **somō* in the North and East Saami varieties; only Lule Saami *såpme* presupposes illabial PS **somē* < FS **suma*. The existence of the SaaN variant *sapmu* in addition to *sopmu* can be explained by the dissimilation tendency of original *o* next to a labial consonant (cf. e.g. SaaN *monni* ~ *manni* ‘egg’; Aikio 2009: 118).

Finnic *sumu* can be analyzed as a derivative with the nominalizing suffix *-u* alongside several correlates belonging to the same semantic field. Saami *sopmu*, on the other hand, has no derivational correlates (we may assume that SaaL *såpme* is a secondary variant). Considering the skewed distribution, too, the Saami word is probably a loan from Finnic *sumu* (cf. Larsson 2000: 184). [Loan F > Saa]

50) Fi. *taju* ?~ SaaN *dádjut*

PFS reconstruction: F: **taju-*, Saa: ?**täjo-*

Distribution:

Fi - (Ka) - - - Est - -

- ‘UPLNISK -

SSA suggests that the Saami verb **täjō-* ‘to fool about, behave foolishly’ might be a loan from Finnish *taju* ‘consciousness, sense’, *tajuta* ‘realize, grasp’ instead of its cognate. Due to the irregular vowel (Fi. *a* : Saa. *ā*) of the initial syllable, cognation should be excluded, but the loan explanation is complicated by the differing semantics: a negating shift from ‘sense’ to ‘senselessness’ must be assumed at some phase of the process. Saami *dádjut* might also be an independent derivative of SaaN *dádjadit* (S–N) ‘understand’, (N) ‘be able to; find the way’, which can be more straightforwardly explained as a Finnic loanword. The Finnic distribution of *taju* outside Finnish is quite restricted; the Estonian *taju-* word family has mostly been taken into use after the language reform of early 20th century, but apparently there are traces of earlier dialectal usage (EES s.v. *taju*), cf. Wiedemann *taiomán* [*taio man?*] *olema* ‘be fully conscious’. Finnic *taju* is probably a derivative of the same **taj(e)* stem as Fi. *taita-* ‘be able to; know’ (Ing Ka Vo Vs), in Old Finnish also ‘understand’ (SSA); cf. also Est. *taip* : GEN *taibu* ‘wit’, *taipa-* ‘understand, realize’ and Fi. *taipu-* ‘bend (intr.)’. [?Loan F > Saa]

51) Fi. *vaimo* ~ SaaN *váibmu*

PFS reconstruction: F: **vajmo*, Saa: ?**vājmo*

Distribution:

Fi Ing (Ka) - - - Est Vs -

S U P L N I Sk A T

Finnic *vaimo* has the meanings ‘wife, woman’ (Fi Ing Ka), ‘spirit, soul; ghost, gnome’ (Est Vs) and ‘peasant working woman’ (Est hist). Saami **vājmo* means ‘heart’ (S–A), ‘mind, character’ (S U L) and ‘stomach’ (Sk). Cf. also the derivative **vājmele* ‘eager, greedy’ (L N I K T). The initial-syllable vowel (Fi. *a* : Saa. *ā*) is irregular for inherited vocabulary, so the Saami word is probably an early Finnic loan (cf. Saarikivi 2009: 130–131; Aikio 2009: 54). The original meaning of Finnic *vaimo* seems to be ‘spirit, soul’, as there are Mordvin cognates MdE *ojme*, M *vajmä* ‘spirit, soul; breath’. According to Saarikivi (ibid.), the Finno-Mordvinic proto-form **wajma-w* is based on a former derivative **wajje-ma-* from the verb **wajje-* ‘breathe’ (> SaaN *vuoiŋnadit* ‘id.’). [Loan F > Saa]

Loans from Saamic into Finnic

52) Fi. *aimo* ~ SaaN *áibmu*

PFS reconstruction: F: **ajmo*/**ajma*, Saa: ?**ājmo*

Distribution:

Fi ‘Ing (Ka) - - ‘Vo ‘Est - -

S U P L N I Sk - -

Finnish-Karelian *aimo* ‘hefty, ample; decent, splendid; genuine; permanent’ has a possible Finnic cognate in Ing. Vo. Est. *aima* ‘mere, merely’.¹¹ Saami **ājmo* has the meanings ‘air; storm; world; the other world; era, lifetime; distance; spirit, mind; power, capability’ and also occurs in expressions such as SaaS *aajmoen* ‘decent, right, quite’, N *áimuiin* (P L) ‘in good condition, in good care’, I *ááimuiin* ‘in safe keeping’.

The initial-syllable vowel correspondence (Fi. *a* : Saa. **ā*) is not regular for inherited words, and the semantics also differ quite a lot. The oldest meanings of Saami **ājmo* are probably ‘air’ and ‘world’ (cf. E. Itkonen 1934), and the senses of intervals in time and space can

11. Note *aimo* ‘coal gas’ should be separated from these words on semantic grounds, and instead analyzed as a loan from Proto-Scandinavian **aimōn-*, **aimaz-* > Old Norse *eimi*, *eimr* ‘smoke, steam, fire’ (Ante Aikio, p.c.), cf. LÄGLOS s.v. *aimottaa*.

be derived from them. The meanings ‘spirit, mind’ and further ‘capability, power’ probably originate from a confusion with **vājmō* (SaaN *váibmu*) ‘heart; mind, character’, evidently from former ‘spirit, soul’ (see 13) *vaimo* ~ *váibmu*). The expressions with the meaning ‘proper, decent’, etc. follow the same semantic model as SaaN *albma* ‘real, proper’ ~ *albmī* ‘sky, heaven; air; weather, storm’ (cf. Fi. *ilmi* ‘visible, obvious, real’ ← *ilma* ‘air’).

Wiklund (1894: 54) has proposed a Scandinavian etymology for Saami **ājmō* (← PScand. **haima*- ‘village’ > Old Norse *heimr* ‘home district; world’), also quoted by Sammallahti (1998: 227), although E. Itkonen (1934) considers the etymology semantically unlikely. The Finnic words *aimo*, *aima* have been connected with the common adverb *aivan* ~ *aivoin* ‘quite, totally’ and its nominative stem *aiva* (old literary Finnish: ‘mere’), for which both a Germanic and an Indo-Iranian loan etymology have been proposed (Tunkelo 1913: 93–96; SSA). Since the word *aimo* with a labial vowel is virtually confined to Finnish (most dialectal attestations in Southern Ostrobothnia and Northern Häme) and its semantics differ from both *aima* and *aiva*, a borrowing from Saami into Finnish could also be considered. The adjectival/adverbial derivatives of **ājmō* as in SaaS *aajmoen* ‘decent, right’ would serve as a credible loan source for Fi. *aimo*, provided that those were also known in the extinct Saami varieties of southern Finland. Fi. *aimo* has been adopted into the small group of (usually deverbal) uninflected adjectives with *-o/ö* (cf. Hakulinen 1979: 217), perhaps through analogy with *kelpo* ‘good, splendid, decent’ (← *kelvata* ‘be good enough’). [?Loan Saa > F (?Parallel development)]

53) Fi. *eno* ~ SaaN *eatnu*

PFS reconstruction: **eno*

Distribution:

Fi - Ka - (Ve) - - - -

S U P L N - Sk K -

Finnish *eno* in senses related to waterways occurs only in Far-Northern dialects as ‘main river; watercourse’ and also elsewhere in the compound word *enovesi* ‘spring flood’ (Urjala), ‘wide open lake’ (Kuhmo), ‘river’ (Täräntö). White Sea (and Rukajärvi) Karelian *eno* means ‘deep place, fairway (in a river)’, cf. also the Veps name of the (small?) river *enoi-jogi* (VVS). Saami **eanō* means ‘(large) river,

main river’. The northern distribution of the Finnic word suggests it as an obvious Saami loan; the Saami item is a derivative of PS **eanē* ‘big’ (Aikio 2009: 245–246). Fi. *enovesi*, especially in senses not directly related to a river, may instead be a parallel coinage based on *enä* ‘big’. [Loan Saa > F]

54) Fi. *kiehtoa* ?~ SaaN *giestu*, L *giestit*

PFS reconstruction: **kēšto-* (**kēšta-*)

Distribution:

Fi - (Ka) - - - - -

- - - L N I Sk - -

The meanings of the Finnish verb *kiehtoa* ‘go around, swirl; spin, twist; fascinate, captivate, enthrall’ can be connected to SaaL *giestit* ‘wrap, twist’ and SaaN *giestu*, L *giesto*, ‘a coil of rope’, as well as I *kiästu*, Sk *kiestt* ‘a bundle of roots’. The phonological forms regularly reflect FS **kēšta-/kēšto-*. The second-syllable vowel, however, is labial only in the Finnish verb and the Saami noun correlate, so a proto-form with a labial vowel can hardly be reconstructed. Furthermore, the distribution especially in Finnic is quite narrow, concentrated to the eastern and northern Finnish dialects (the Karelian occurrence in Suistamo is clearly a loan from Finnish), so it seems more likely that *kiehtoa* is a Saami loan parallel to Fi. *kietoa* ‘wrap, twist’, which has been shown to derive from PS **kietę* = SaaN *giehta* ‘hand’ by Ylikoski (2010: 384–386). The loan variant with *-ht-* apparently reflects a source in a Saami variety that had developed pre-aspiration of single plosives, as in present-day North Saami. – The Saami stem **kiestō, *kiestē-*, then, seems to be connected to SaaN *giessat* (**kiese-*; S–K) ‘wind, wrap, tie around’ (perhaps through syncope in the verbal derivative: **kiestē-* < **kiesęttē-*). [Loan Saa > F]

55) Ka. *koruo* ?~ SaaN *goarrut*

PFS reconstruction: **koro-*

Distribution:

- - Ka (Lu) - - - - -

S U P L N I Sk K T

Saami **koarō-* ‘sew’ and Karelian *koro-* ‘stitch, tack; do sloppily; talk nonsense’ make a sound-historically tenable comparison, but the Finnic distribution confined only to Karelian suggests that we are dealing with a Saami loanword (Aikio 2009: 101–102). It seems probable that

Ka. *koro-* has also been influenced by Fi.-Ing.-Ka. *kuro(i)-* ‘sew slop-pily, stitch, tack, shrink’, which has then partially been replaced with *koro-*: according to KKS, *kuruo* can be found only in Karelian dialects next to the Finnish speaking area, whereas *koruo* is frequent in dialects with less contact with Finnish (outside White Sea Karelia). The Finnish-Karelian verb *kuro(i)-*, in turn, has a regular cognate (SaaN *gorrat* ‘tie together’) in all Saami languages. The possible connection between the semantically and phonetically close verbs SaaN *gorrat* (< PS **kore-* < Pre-Saami **kuri-*) and *goarrut* (< PS **koarō-* ?< Pre-Saami **koro-*) remains unclear. [Loan Saa > F]

56) Fi. *kyylä* ?~ SaaN *govlut*

PFS reconstruction: F: **kivlu-/küklu-*, Saa: **kuklo-*

Distribution:

Fi - - - - -

S - P L N I ‘Sk <u>K</u> -

The Finnish verb *kyylä* occurs only in old literary Finnish; the dialectal variants *kyylä*, *kyylätä*, *kyölätä*, *kyylättää*, *kyöläyttää* share the meanings ‘nauseate; feel like belching, vomiting’. The Saami word **koklō-* (cf. S *gåglođh*, L *gågllot* ~ *gávllot*) has the nearby meanings ‘vomits, retch, belch’.

The reconstructions for the Finnish and Saami stems differ from each other, and the occurrences in Finnish dialects are sparse, morphologically diverse, and concentrated in Ostrobothnia and Northern Finland, which all suggests a Saami loan origin for the Finnish words. Instead of the anticipated nativization ***koulu-* or ***kuulu-*, the Finnish word has been adapted to the front vowel class apparently due to affect-based variation and possibly also to avoid homonymy with the frequent verb *kuulua* ‘be heard’. [?Loan Saa > F]

57) Fi. *luppo* ?~ SaaN *lahppu*

PFS reconstruction: F: **luppo*, Saa: **lippu/lüppo*

Distribution:

Fi - Ka - - - - -

- U P L N - Sk K -

Finnic *luppo* and Saami **leppō* both mean ‘lichen hanging on trees’, Fi. dial. also ‘bad grass, dry bits of plant, etc.’. The irregular correspondence between the initial-syllable vowels and the northern distribution of the Finnic word (White Sea Karelia, Far-Northern and Ostrobothnian dialects of Finnish) indicate that the word was borrowed

from Saami into Finnic. The vowel correspondence is atypical even for loanwords, but Aikio (2009: 117–119) has proposed that the loan source was the earlier Proto-Saami **loppō*, and that the **o* later changed into **ē* as part of a dissimilatory tendency next to a labial consonant (cf. SaaN *laksi* ‘dew’ < PS **lēpsē* < **lopsē* < PU **lupsa*). Another possibility is that the original vowel was illabial and became labialized on the borrowing side due to the following labial sounds. [Loan Saa > F]

58) Fi. *maarto* ?~ SaaN *márdu*

PFS reconstruction: F: **marto*, Saa: **mārto*

Distribution:

Fi - Ka - - - - -

- - - - N I Sk K T

Finnish-Karelian *marto* ~ *maarto* ‘fry, small fish’ and Saami **mārto* ‘undeveloped fish spawn’ are, as already suggested by SSA, in a loan relation rather than cognates. The vowel correspondence (Fi. *a(a)* : Saa. *ā*) is not regular for inherited vocabulary. As the Finnic distribution covers only the Eastern and Häme dialects of Finnish and some Karelian parishes, and the Finnic word shows irregular sound variation (*a* ~ *aa*), it seems obvious that the word is a loan from Saami into Finnic. [Loan Saa > F]

59) Fi. *poro* ?~ SaaN *boazu*

PFS reconstruction: F: **poro*, Saa: **počov* > **počoj*

Distribution:

Fi - Ka - - - - -

S U P L N I Sk K T

Finnic *poro* ‘reindeer’ and Saami **poacōj* ‘id.’ have been equated with Mari W *putšâ*, E *püt’sä* ‘id.’ and Udm. *pu(d)žej* ‘deer, reindeer, elk’, as well as several Ob-Ugric and Samoyed words that, however, show irregular vocalism (MsN *pāsiγ*, KhE *petšəγ* ‘reindeer calf’, Kamas *po’dū* ‘goat’; Koivulehto 2007: 251). The Saami, Mari and Udmurt words can be derived from PU **počav* (Sammallahti 1998: 232), which, according to Koivulehto (2007: 251–254), is an Aryan loanword.

Connecting Finnic *poro* with this cognate set would require explaining the irregular consonant *r* in place of the expected *t* (**poto* < FS **počo*). One explanation (e.g. SKES s.v. *poro*) is that the word has been contaminated with *peura* (< *petra*) ‘deer’. Koivulehto (2007:

255–256) does not accept this explanation but maintains that the *r* is the result of generalization of a weak gradation form. However, Koivulehto's theory has several weak points. First, he has to hypothesize a shift of stem type from **poto* to **potoi*, which would in SW dialects be treated as a closed second syllable and result in a weak grade **podoi* and later *poro* (cf. *orvo(i) < orpoi* 'orphan'). Yet, other dialects show no trace of an assumed diphthong, and the weak grade variant (*t :*) *r* did not begin spreading in Finnish dialects until the 18th century; in SW dialects the dominant reflex was still (*t :*) *δ* in the early 19th century, while the surrounding Häme dialects had (*t :*) *l*. (Virtaranta 1958: 194–197, 213–216; Rapola 1966: 96–101.) It is thus highly improbable that this kind of weak grade form could have developed early enough to spread through a vast dialect area up to White Sea Karelia (note that the word already appears in Schroderus' dictionary in 1637). Also, as regards the cultural context, it is not very convincing to place the origins the word 'reindeer' in agricultural South-West Finland. Instead, the semantics and geographical distribution point to a Saami loan origin. Sound substitution from Proto-Saami **c* (ɟ) < **č* (**poacōj* < Pre-Saami **počov*) to Proto-Finnic *r* (*poro*) has not been attested in other loanwords but would be phonetically feasible, at least if the affricate is presumed to have had a more conservative, cacuminal pronunciation. [?Loan Saa > F]

60) Fi. *rouko* ?~ SaaN *roavgu*

PFS reconstruction: **rovko* (Saa: **rokvo*/**roŋvo*)

Distribution:

Fi - - - - -

S U P L N I Sk K T

Finnish *rouko* 'sheepskin rug' and *rou(k)konen* 'old and worn skin rug, etc.' are clearly loans from Saami words going back to PS **roakvō* or **roaŋvō* 'skin rug'. The former word *rouko* in the northernmost dialects is apparently a more recent borrowing in comparison to *rou(k)konen* (usually in plural, *rou(k)koset*), which occurs in several dialect areas of central Finland. Apart from the distributions, another indication of the loan origin is that the consonant centre in Proto-Saami must have been **-kv-* or **-ŋv-* (> West Saami **-vk-*, East Saami **-v(v)-*; e.g. I *roavvu*, Sk *råvvu*). This rules out the possibility of borrowing from Finnish to Saami, since substituting Fi. *-uk-* with anything other than

-*vk-* in Saami would have been phonologically unjustified. The Saami word seems to be a Scandinavian loan (< Pre-Old-Norse **rōggwō-*). (Aikio 2009: 145–148, 274.) [Loan Saa > F]

Convergent derivatives of cognate stems

61) Fi. *alus* ~ SaaN *vuolus*

PFS reconstruction: **aluks(i)*

Distribution:

Fi Ing Ka Lu Ve Vo Est Vs -

- - - L N - Sk K -

Finnic *alus* ‘thing below something, lower part, under-’; (Fi Ing [?> Vo Est]) ‘boat, ship’; (Fi Ka) ‘area, domain’; (Fi Ing Ka Ve) ‘lining of a garment’ and Saami **vuolōs* ‘lower part (especially of a net), under-’¹² are good phonological and semantic matches, but the distribution of the Saami word makes one suspect that it might be a calque derivative of SaaN *vuolli-* (~ Fi. *ala-*) ‘lower’ after the model of Fi. *alus*; cf. also SaaN *vuolōs-biktasat* ‘underclothes’ and Fi. *alus-vaatteet* ‘id.’ (The first part of SaaI *alus-pihtaseh* ‘id.’ is an unmodified loan from Finnish). The Saami item may also have been influenced by PS **vuolus(e)* (S–T, e.g. SaaN *vūlos*, I *vuálus* ~ *vuá’los*, S *våålese*) ‘down(wards)’; cf. also SaaN *vuoluš* ‘mat, saucer; base’, I *vuoluž-* ‘lower, under-’, Sk *vuâlaž*, K *vueleñž*, T *-vjelaj* ‘underlay’ < PS **vuolōnčē*, formally a possible cognate with but more likely a calque loan from Fi. *alu(i)nen* ‘underlay, undercloth, underside, thing below something’ (Ka Lu Ve Est Vs); note also Fi. dial. *alu(m)mainen* ‘undermost’ (Vo Est).

The origin of the labial vowels in this word family is unclear; only F. *alus* can be connected to a well-known derivative class with the denominal suffix **-uks/-yks-*, cf. Fi. *edus* ‘frontside’ ← *esi* : *ete-* ‘front, fore-’, *vierus* ‘place beside’ ← *vieri* ‘side’ and dozens of other nouns (see Hakulinen 1979: 137–139). The labial vowel in this suffix is secondary, though (either due to secretion – cf. Hakulinen 1979: 140 – or analogy from deverbal **-uks/-yks-* nouns). Similar **-ks-* derivatives of **ala-* in Mordvin (E *alks* ‘thing under something;

12. SaaSk e.g. *kōddâz-vuâlas* ‘board under a threshold (Fi. *kynnyksen aluspuu*)’, *käädd-vuâlas* ‘heel of a fur shoe (Fi. *karvakengän takapohja*, “kannan-alus”); K *kānd-vuelaš* (indecl.) ‘id.’ (KKLS 786)

bed') and Komi (*uļes* 'chair; floor') have no trace of a suffixal labial element. The denominal suffix **-ōs* (SaaN *-us*) occurs in a number of other Saami derivatives, e.g. SaaN *bajus* 'top part of something' (← *badji-* 'upper, over'), *bealjus* 'ear-flap of a cap' (← *beallji* 'ear'), but the derivational type appears to be a borrowing from Finnic also on distributional grounds. [?Cognate stem excl. lab. vowel]

62) Fi. *kummuta* ?~ SaaN (Friis) *gobbolastet*

PFS reconstruction: **kumpu-*

Distribution:

Fi - - - - -

'S - - 'L (N) - - -

The Finnish verb *kummuta* (: *kumpua-*) 'gush, bubble, foam' has been connected to the noun **kumpi* 'mound/wave' (> Fi. *kumpu* 'hill, mound'); lately, though, Aikio (2014b: 83) has considered the Mari, Ugric and Samoyedic words with the meaning 'wave' to form a separate etymon, PU **kompa*. Although the semantics related to water connects **kompa* 'wave' to Fi. *kumpua-*, the latter could also be a derivative of the phonologically closer **kumpi* 'mound', if we assume a semantic development 'protrude, bulge out' > 'spurt out' > 'gush, bubble'. SaaS *gabpeldidh*, L *gåppåldit* 'swim, float on water' can be formally derived from the same stem (PS **kompe* > SaaS *gabpe*, L *gåbbå* 'hillock, mound'). Mordvin (M) *kombêldâms* 'bubble out, heave, ripple, foam' suggests that the verbal derivatives might be relatively old, as it closely resembles the semantics of Fi. *kummuta* and the phonological form of the Saami verbs. Only a few obsolete Saamic forms point to a PS second-syllable labial vowel, though (SaaP *goppuldit* (LW §1865: *коп'р'у̯лре^h*) 'float', Friis *gobbolastet* 'sleep floating on water (of a seal)' and LÖ *kabbol* 'gathering of fish for spawning'), and since these have no formal parallels in Finnic, the labial-vowel derivatives in Finnic and Saami are probably unrelated. The Saami verbs have probably acquired the meaning 'to float' through association with SaaSk *kåbllad* (K T) 'to float', S *gable* 'net float' and *gåbloe* 'lung' (~ Fi. *kupla* (Ing Ka Lu Est) 'bubble; air bladder; floating thing'). [Cognate stem excl. lab. vowel]

63) Fi. *lumota* ~ SaaN *lapmut*

PFS reconstruction: Fi. **lumo*-, Est. **luma*-, SaaN **li/iimo*-, SaaI-K **lumo*/e-

Distribution:

Fi ‘Ing Ka - - - ‘Est Vs -

- - - - N I Sk K -

Finnic *lumota* ~ *lumoa* ‘enchant, bewitch’, and SaaN *lapmut*, I *lommood*, etc. ‘bewitch; (N also) get bewitched’ have identical meanings, but there is irregular sound variation in both language groups. Ingrian and North Estonian show an illabial stem vowel and gemination of the central consonant (*lummata*), and Finnish (*silmän*)*lume* ‘eyewash, illusion’ cannot be considered a regular derivative of a labial stem either. There seem to be variants pointing to an original illabial vowel in the second syllable in Skolt and Inari Saami as well (Sk *loommâd*, I *lõmmîd* (KKLS 221)), which may, however, reflect contamination with Sk *lõõmmâd* ‘hide oneself’ (cf. *loommâd* i.a. ‘turn something invisible’).¹³ SaaN *lapmu*- instead of the expected ***lopmu*- can be explained by a dissimilation tendency attested particularly in North Saami: Proto-Saami **o* has sporadically changed into **e* in a position next to a labial consonant (e.g. SaaN *laksi* ‘dew’ < PS **lēpsē* < **lopsē* < PU **lupsa*; see Aikio 2009: 118). The Finnic verb with its labial stem is probably based on the (deverbal) noun *lumo* ‘spell, enchantment’ (?< **luma*-v) and the labialized variant has then been borrowed into Saami. Considering the narrowish Saami distribution, it is also possible that all the Saami variants of this word represent a loan from Finnic (unless SaaS (Røros) *læmmamadtedh* ‘lie, tell lies’ is also to be connected to these). The Finnic(-Saami) word has a regular cognate in Mari: (E) *šinčam lumem* ‘I bewitch’ (*šinčam* ‘eye’ acc). Alternatively, a Germanic loan etymology has been presented for the Finnic word (← PGerm. **klumō(ja)n*-, PScand. **klumōn* > Norw. dial. *kluma* ‘sprachlos machen, lähmen’; LÄGLOS s.v. *lumota*), which would then exclude the possible cognates in other Uralic branches. [Cognate stem; lab. vowel F > Saa?]

13. Lagercrantz (LW § 3158) connects SaaN *lapmut* with the verb *lapmat* ‘tickle (esp. of lice)’ (Nielsen), and according to Lagercrantz also ‘move, stir’, saying: “Das Verb bezeichnet die Bewegung des Blutes des Zaubersers, das sich um den Körper des verzauberten Menschen herum bewegt” (the verb denotes the movement of the blood of the sorcerer, which moves around the body of the bewitched person). This association seems secondary, though. SaaN *lapmat* ‘tickle (esp. of lice); move’ could perhaps be more plausibly connected to *lapmat* ‘crouch down, hide oneself’ (S, P–K), since lice hiding in someone’s hair tend to tickle.

64) Fi. *meno* ~ SaaN *mannu*PFS reconstruction: F: **meno*, Saa: ?Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est	Vs	-
----	-----	----	----	----	----	-----	----	---

-	U	-	L	N	I	-	-	-
---	---	---	---	---	---	---	---	---

Finnic *meno* ‘going; loss; expenses; commotion’ and Saami **mēnō* ‘going, trip, occasion’ are nominal derivatives of the cognate verbs Fi. *mene-*, Saa. **mēnɛ-* ‘go’ (< PU **meni-*).¹⁴ Supposing that the derivative **meno* was a common Saami-Finnic formation, we would expect the regular sound developments to yield SaaN ***meannu*, and therefore the present SaaN *mannu* can only be reconstructed as far as Proto-Saami **mēnō*. We could perhaps consider that the Pre-Saami derivative **meno*, due to the association with the root verb **mene-*, followed its phonological development instead of the regular sound laws, but there is no actual evidence of this kind of development having taken place. [Cognate stem excl. lab. vowel]

65) Fi. *näkö* ~ SaaN *niehku*PFS reconstruction: F: **näko*, Saa: ?Distribution:

Fi	Ing	Ka	Lu	-	Vo	Est	Vs	Li
----	-----	----	----	---	----	-----	----	----

-	U	P	L	N	I	-	-	<u>T</u>
---	---	---	---	---	---	---	---	----------

Finnic **näko* ‘eyesight; vision; appearance’ can be analyzed as a nominal derivative of the verb *näke-* ‘see’. Saami **niekō* ‘dream’ has a verbal correlate with an original labial stem vowel in Ter Saami (*niek-kad* ‘dream (of something)’ < **niekō-*); other Saami varieties have a slightly more complex verbal derivative **niekentɛ-* (SaaN *niegadi*; SLI Sk K) ‘id.’. Both the Finnic and Saamic verbs go back to PU **näki-* (~ Mde *ñejems* ‘see’, Udm *naanĵ* ‘look’, KhE *nĭ-* ‘be seen’, Hung. *néz* ‘look’). SaaN *niehku* cannot go back to a common FS form **näko*; the expected regular outcome would be SaaN ***náhku*. Thus, *niehku* must be analyzed as a Proto-Saami or later derivative (cf. *meno* ~ *mannu* above). Another similar-looking word, SaaN *neahku* ‘appearance’ (L I) is, based on phonological and distributional grounds, a loan from Finnic. [Cognate stem excl. lab. vowel]

14. Related Ludic and Veps words are attested in constructions Ve. *ühthe män(d)ho* ‘at a stretch, without stopping’, Lu. *t’ähä mänō* ‘for some time lately’, while Ume Saami has *mannoo* ‘Reise’ (Schlachter 1958: 93).

66) Fi. *punoa* ~ SaaN *botnit*, *botnut*

PFS reconstruction: **puno-* (Saa. *botnit* < **puna-*)

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	Est	Vs	-
----	-----	----	----	----	----	-----	----	---

'S	'U	'P	L	N	I	Sk	K	T
----	----	----	---	---	---	----	---	---

The Finnic verb *puno-* and its supposed Saami cognates all have the meaning 'weave, braid', SaaN-Sk *botnut* also 'wind thread around the end of a rope'. Cognates with similar meanings have been presented from all Uralic branches, e.g. MdE *ponams* 'braid, twist, plait', Hung. *fon* 'spin; plait', Nen. *paŋkāl-* 'braid, twist, plait' (SSA). Since the westernmost Saami varieties only have a verb with an illabial stem vowel, the labial vowel variant is most probably a central Saami innovation, either derived from the illabial variant or borrowed from Finnic. Finnic *puno-* either is a **-j* derivative from the Uralic **puna-* stem (**puna-j-* > Late PF **puno-*, cf. Ing. *punnōja* INF; according to T. Itkonen (1983: 373) this is an analogical form) or was formed with an already abstracted derivational suffix *-o*. [Cognate stem; lab. vowel F > Saa?]

67) Fi. *tahtoa* ?~ SaaN *duostut*

PFS reconstruction: **tašto-* ~ Fi. **tašta-*

Distribution:

Fi	Ing	Ka	Lu	Ve	Vo	'Est	'Vs	'Li
----	-----	----	----	----	----	------	-----	-----

S	U	P	L	N	I	Sk	K	T
---	---	---	---	---	---	----	---	---

Finnic *tahto-* 'want, desire, hope; be inclined to' and Saami **tuostō-* 'receive, meet; catch; oppose, have one's say in; repulse, ward off' have been reconstructed to PFS **tašto-* by SSA and SKES. The gap between the Finnic and Saami meanings is rather large, but it might be bridged by supposing a semantic shift from the original, concrete 'grab, catch' to a more abstract 'try to get' and finally to 'want' in Finnic (SSA; Setälä 1927). As regards the phonology, though, it is noteworthy that an illabial stem presupposing PFS **tašta-* occurs in Est. *tahtma* : PRS.1SG *tahan*, such adverbs as Fi. *taha-llaan* 'intentionally', [*mitä*] *taha-nsa* 'any(-), whatever someone likes', and Old Literary Finnish (1648) *?tahta*: TRANSL *tahdast* 'will'. The verbs in Veps (*tahtoida* ~ *tahtōd'a* : PRS.1SG *tahtōñ*) and Finnish Savo dialects (*tahtoja* : PRS/PRET.1SG *taho'n*; see e.g. Rapola 1966: 473, 483) also show traces of an **oi* diphthong, which suggests that this is an old (frequentative) derivative **tahta-j-* > **tahtoi-*. The rest of those Finnic varieties where **oi* stems have normally been preserved as distinct from **o* stems (Ludic, Olonets Karelian, Ingrian, and the Finnish

dialects of Southern Ostrobothnia and Western Uusimaa) show a diphthongless *tahto*- stem in this case, which could partly be explained by the influence of the deverbial noun *tahto* ‘will’ (< **tahta-v*) and partly by the influence of dialects where the diphthong was regularly lost. South Estonian *tahtuma* ‘(make) feel like (doing), Fi. *haluttaa*’ is morphosyntactically different from **tahto*- and should be analyzed as an automative-reflexive verb derived with *-u*. The stem vowel in Livonian *tõ’dõ* is ambiguous and probably goes back to **a* in the light of the other Southern Finnic data. All in all, the Finnic and Saami verbs with a labial vowel stem are likely to be secondary formations even if the original stem **tašta-* is common.¹⁵ [?Cognate stem excl. lab. vowel]

68) Fi. *teko* ~ SaaN *dahku*

PFS reconstruction: F: **teko*, Saa: ?

Distribution:

Fi	Ing	Ka	-	Ve	Vo	Est	Vs	Li
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<u>S</u>	-	P	L	N	I	-	-	-
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Finnic *teko* and Saami **tekō* ‘making, action, deed, work’ correspond to the cognate verbs Fi. *teke-*, Saa. **teke-* (N *dahkat*) ‘do, make, etc.’ (< PU **teki-*).¹⁶ As with Fi. *meno* ~ SaaN *mannu* (see above), the Saami nominal derivative *dahku* cannot be regularly derived from the supposed FS form **teko* and must thus be analyzed as a later development (or an irregular adaptation to the phonological shape of the root verb). [Cognate stem excl. lab. vowel]

69) Fi. *tunto* ~ SaaN *dovdu*

PFS reconstruction: **tumto*

Distribution:

Fi	-	Ka	(Lu)	-	-	Est	-	-
----	---	----	------	---	---	-----	---	---

-	-	P	L	N	I	<u>Sk</u>	-	-
---	---	---	---	---	---	-----------	---	---

Finnic *tunto* ‘sensation; feeling’ and Saami **tomtō* ‘knowledge; feeling; experience’ are derivatives of the corresponding verbs Fi. *tunte-* and Saa. **tomte-* ‘know; sense, feel; understand, etc.’ (< PU **tumti-*).¹⁷

15. A less likely alternative is that Saa. **tuostō-* is an irregular derivative of **tuoste-* (SaaN *duostat*, S–K) ‘dare’, which is cognate with Fi. *tohtia* ‘dare’ and MariE *tošta-* ‘dare; be allowed’.

16. Data additional to SSA: South Saami *dahkoe* ‘action, act, doing’ (Bergsland & Mattsson Magga 1993: 57).

17. Data additional to SSA: SaaI *tobdo* ‘Gefühl, Bewusstsein; Gewissen’ (InLW: 311), Sk *tåbdd* ‘sensation’ (Sammallahti & Mosnikoff 1991 s.v. *tunto*).

These could go back to a Saami-Finnic derivative **tumto*, but considering the rather narrow distributions, the words could rather be analyzed as parallel coinages in Finnic and Saami. (The Estonian *tund* : GEN *tunnu* appears only in Wiedemann's dictionary and in Ludic there is only a slightly different labial-vowel derivative *tundoz* 'acquaintance'.) [?Cognate stem excl. lab. vowel]

Other parallel developments

70) Fi. *kalto* ?~ SaaN *guoldu*

PFS reconstruction: **kalto*

Distribution:

Fi - - - - -

S U P L N I <u>S</u> <u>k</u> <u>k</u> <u>T</u>

Finnish (dialectal) *kalto* means i.e. 'icy spot on ground, glaze'. Saami **kuoltō* means 'snowstorm, snow vortex', (N I) 'frosty wind'. The Saami stem is also used in verbal forms in all Saami varieties except North and Inari Saami (e.g. SaaS *gāaldodh* 'swirl (of snow)'). Aikio (2006b: 28–29) presents a Germanic etymology for the Saami word: Pre-Saami **kalto-* ← PGerm. **kalda-* 'cold' or **kaldō-* (> Icelandic *kalda* 'blow coldly') and does not state anything about the possible connection with Fi. *kalto*. The semantics of the Finnish and Saami words differ considerably and can be connected only in the sense that they refer to cold things. This is most probably due to both words being separate loans from Germanic languages. Known Germanic/Scandinavian loans in Finnish include e.g. *kalea* 'chilly; hard' (cf. Old Norse *kala* 'frieren, kalt machen'; Aikio 2006b: 29), *kolea* (~ SaaN *goallut* 'be cold' ← PreGerm. **kolo-*; *ibid.*) and northern Finnish *kalla* 'heap of ice on shore, hard unmelted ice' (← Swe. dial. *kalla, kalle, kall* 'id.'; SSA s.v.). Finnish *kalto* in this form occurs in a very restricted area in the northern subgroup of SW dialects and some surrounding parishes. In other SW, Northern Häme and Kainuu dialects the word has been recorded in the form *kallo* (also *kallokeli* 'icy conditions'). The form *kalto* could be explained as an analogical "strong grade" of the stem *kallo* (cf. *pellon* : *pelto* 'field GEN.SG : NOM.SG' → *kallon* : *kalto*); in SW dialects the weak grade of consonant gradation occurs paradigmatically more often than in other dialects, which may have caused confusion of paradigms in the border-area dialects. At least in

the Kainuu dialects, *kallo* must be connected to the above-mentioned *kalla*, since both have been widely attested in the sense of ‘unmelted heap of ice on shore or on lake’. In the SW and Häme dialects the word *kallo* meaning ‘icy spot on ground, frost’ is rather a loan from Finland-Swedish dialectal *kalla*, *kallo* ‘frost’ (see OÖD 416–417). [Parallel development]

71) Fi. *kalu* ?~ SaaN *gálvu*

PFS reconstruction: F: **kalu*/?**kalvu*, Saa: ?**kälvo*

Distribution:

Fi Ing Ka Lu Ve Vo Est - -

- - P L N I Sk - -

Finnic *kalu* ‘thing, object, tool; penis; possessions’, (Ka Ve) ‘wooden stick’ is equated with Saami **kälvō* ‘ware, tool’ by SSA. However, the vowels of the initial syllable are not regular for an inherited word, and there are no traces of the assumed form **kalvu*, which would have been irregularly reduced to *kalu* in Finnic, so the equation should be rejected (NSES: 333–334; Saarikivi 2009: 137–139). According to Saarikivi (ibid.), Fi. *kalu* is a loan from Old Russian *kolū* ‘stick, piece of wood, timber’ and Saami *gálvu* might be a derivative from *gálva* ‘dry wood’, in eastern (and Lule) Saami especially ‘debarked, hard, dry wood’ (though it should be noted that this kind of denominal **-e* → **-ō* derivation in Saami is rare). Finnic *kalu* has apparently influenced the semantic development of Saami **kälvō*. [Parallel development]

72) Fi. *lahko* ?~ SaaN *luosku*

PFS reconstruction: **laško*

Distribution:

Fi - Ka Lu Ve Vo Est Vs (Li)

- - - ‘L N ‘I ‘Sk - -

Finnic *lahko* has the meanings (Fi) ‘group separated from other community, sect, party, working community’, (FiE Ka Lu Ve) ‘plank’, (Vo) ‘cleaved block of wood’, and (Est Vs) ‘separation; parting; sect’ (Cf. Est. *lahku* ‘apart’, Est. Vs. *lahkuma* ‘to part’, Li. *lq’gō* ‘to split, cleave (intr.); to hurt strongly’). Saami words comparable with these include N *luosku*, (L) *luoská* ‘ramshackle wooden object’ and N (I Sk) *luoskanit* ‘become ramshackle, broken, powerless’, (Sk) ‘get sore’. The fact that *luosku* with a labial-vowel stem exists only in North Saami suggests that it might be a relatively recent derivative. The il-labial Saami stem **luoske* can be reconstructed to PU **loški-* together

with Fi. *lohjeta* (: *lohkea*-) ‘cleave, split, rift (intr.)’ and Mari *luškâðo* ‘loose, slack’ (Aikio 2006b: 48; 2009: 116–117). Finnic *lahko* appears to be of heterogenous origin. In the sense of ‘cleaved wood’ it is probably a variant of either *lohko* ‘segment’ or *halko* ‘log of wood’ (from *lohkea*- and *halkea*- ‘to split, cleave (intr.)’ or a blend of these two. The obsolete meaning of Fi. *lahko* as ‘working community’ is, according to Ilmar Talve (1979: 169), a loan from Swedish *lag* ‘id.’ (or rather Old Swedish *lagh*; as a phonological parallel cf. Fi. *vihkiä* ‘inaugurate, marry’ ← Old Swe. *vighia*). The sense of ‘separated group, sect’ has apparently arisen from both of those previously mentioned. [Parallel development]

73) Fi. *mauruta* ?~ SaaN *mávrut*, *l muávrut*

PFS reconstruction: F: **mavru*-, Saa: **mävro*-/**mavro*-

Distribution:

Fi - Ka - - - Est ‘Vs -

- - - L N I - K -

Finnic *mauru*- ‘meow; whine, moan’ (in Estonian only *maaru*-, Seto *maura*-) and Saami (L N) **mävrō*- ‘make growling or rattling noises’, (I K) **muovrō*- ‘growl; meow’ are presented as “onomatopoetic parallels” by SSA. Considering the irregularity between the Finnic and (West) Saami initial-syllable vowels and the onomatopoetic character of these words, they can hardly be regarded as etymological cognates. There is also doubt as to whether a **vr* cluster can be reconstructed at the Finno-Saamic stage. [Parallel development]

74) Fi. *tuhto* ?~ Saa. *totko*

PFS reconstruction: **tukto*

Distribution:

Fi - - - - -

- - - L N I Sk K -

Finnish *tuhto* ‘rowing bench’ and Swedish Saami (Friis) *totko* ‘rib of a boat’ are conditionally linked by SSA to the reflexes of PU **tukti* (MariW *tâktâ* ‘rib of a boat’, Komi *tik*, MsE *tot*, KhE *tōyət*, Hung. *tat*, Nen. *tade* ‘crossbar (of a boat)’). As an alternative, SSA gives a Germanic loan etymology (cf. PGerm. **puftōn*, Old Norse *popta*, Swe. *toft*, *-e*, *-a* ‘rowing bench’). The Finnic distribution, limited to several dialect areas of central Finland, would seem to favor the loan explanation (Aikio 2009: 24–25); the actual loan source could also be Middle Low German *ducht* ‘id.’ with *ft* > *χt* (Hofstra 1985: 84, 112 n.

55). The cited Saami word *totko* is probably a variant of SaaN *duoktu*, I *tuáptu* ‘rowing bench’ (L Sk), which is a Scandinavian loan (SSA).¹⁸ [?Parallel development]

Additional data

Additionally, three comparisons not mentioned by SSA can be considered possible Saami-Finnic cognate pairs:

A1) Fi. *mustua* ‘blacken, darken, get dirty’ (Ka Est Vs) ~ SaaN *mostut* ‘become thick, muddy, unclear (liquid, esp. fish-oil and boiled fat); get mixed into broth’, I *mostod* ‘lose color, become darker (clothing)’, Sk *mōsttad* (K) ‘blacken, darken, get dirty’, L *måsstot* ‘get mixed into broth; get angry’, P *mōs’tot* ‘turn bitter’.

Rauhala (2011: 276–278) connects the L–N(–Sk) Saami verbs and corresponding adjectives (SaaN *mosttas* ‘thick, unclear’, L *måstos* ‘heavy, depressed (of head); angry’, I *mostos* ‘dark (of color)’), with SaaS *måstodh* ‘take fright, go wild (of draught reindeer)’, assuming a common semantic starting point of ‘stirred, fuzzy’. Both the Saamic and the Finnic adjectives would thus derive from PFS **musta* ‘unclear, dark’, which, according to Koivulehto (2001: 71), is a loan from Proto-Germanic **mus-ta* > Norwegian *must* ‘steam, fog’. The eastern Saami words might show semantic influence from Finnic *musta/mustua*.

Then again, there is also a South Saami word family *mosne* ‘sour’, *mosnedh* ‘become/be sour’ with an **-ō-* derivative *måsnodh* ‘be/become sour; be in bad mood’, which would make a rather good match for P *mōs’tot* ‘turn bitter (of mind)’ and L *måsstot* ‘get angry’, assuming a PS form **mosnō-*. These words should thus be kept apart from the **mostē/-ō-* word family (SaaS *måstodh* ‘take fright, go wild’ might be a secondary loan from the successors of **mosnō-* in the northmore dialects). Also, it seems that the Lule and North Saami senses of *mostot* ‘get mixed into broth’ have been influenced by the phonologically close SaaP *mastat* ‘get mixed (esp. of herds of

18. As the Germanic word lacks a satisfying Indo-European etymology (Kroonen 2013: 549), one might also consider the possibility of a Uralic loan explanation, possibly PGerm **puftōn-* < PreGerm **tupte-* ← PU **tukti*. The slightly irregular consonant substitution might be due to labial assimilation with the preceding vowel.

reindeer)’ (S–I; possibly a Germanic loan, see Aikio 2009: 263). As both Finnic (Fi–Li) **musta-* and Saami (L–K) **mostē-/ō-* with their verbal derivatives (F. *mustu-*, Saa. **mostō-*) point to original denotations of ‘dirty; unclear’ (Rauhala 2011: 276–278), it is possible to derive them from common Finno-Saamic. In the light of the relatively limited distribution of the Saami item and the etymologically incompatible stem vowel of SaaP *mosttas* (presupposing PS **mostē-* and Pre-Saami **musti-*; L and I nouns equate with the verb stem **mostō-*), a borrowing from Finnic into Saami seems more probable.¹⁹ [?Loan F > Saa (?Cognate)]

A2) Fi. *noitua* ‘bewitch; curse; heal’ (Ing Ka Ve Vo Est Vs) ~ SaaN *noaidut* ‘bewitch; foretell’ (S–Sk).

These may also be parallel derivatives from the cognate words Fi. *noita* (Fi–Vs) ~ SaaN *noaidi* (S–T) ‘witch, sorcerer; shaman, seer’ (Kulonen 2010: 265, 275.) [?Cognate]

A3) Fi. *paju* ‘willow’ (Ing–Li) ~ SaaN *boadju* ‘root sucker of a tree’, I *puájui* ‘willow’ (Sk Kd).

SSA has rejected the comparison and connected the Saami word with MdE *poj* ‘aspen’ due to the vocalism (< **pojV*). If, however, Aikio’s (2013b) new theory that the Saami vowel combination **oa-ē* is a regular reflex of Pre-Saami **a-i* is correct, we could derive both the Finnic and the Saami items from (Pre-)Finno-Saamic **pajiv*. This would, however, exclude the possibility of regular etymological cognates outside West-Uralic (Finno-Saami-Mordvinic), since according to Aikio (ibid.), PU **a-i* would have developed into West-Uralic **j-i* > Proto-Saami **uo-ē* when the intermediate consonant was **j*. The vowel in Mordvin *poj* is in any case incompatible with Finnic *-a-* and also with Proto-Saami *-oa-*, according to Aikio (2013b: 7; 2014a: 9–10). The Permian (Komi and Udmurt) *bad’(pu)* ‘willow’ is probably a loan from Finnic. [?Cognate]

19. The unexpected illabial vowel in the initial syllable of SaaSk *mōsttad* and K *mēsteð* (KKLS 247, 897) may also suggest a relatively late spreading of the word, although there are some old lexemes showing the illabialization of /o/ next to a labial consonant in varieties east from North Saami, e.g. Sk *māā’nn*, N *manni* < PS **monē* ‘egg’ and Sk *pāā’nned*, I *panneed* vs. N *batnit* ~ *botnit* < PS **ponē-* ‘spin, braid’.

Conclusions

In this study, I have analyzed etymological comparisons of SSA with the specific goal of finding out whether it is feasible to reconstruct a common Finno-Saamic proto-form with a labial vowel in the second syllable for each cognate pair. Of 74 pairs total, I found that 34 (46%) are likely to actually go back to a proto-form with a labial vowel, 16 of which can be stated without doubt. Nine pairs have a cognate stem with probably secondary labial vowels on each side, 17 are loans from Finnic into Saamic and nine are loans from Saamic into Finnic. The remaining five proved to be miscellaneous parallel developments.

Etymological cognates	16	22%
Possible cognates	18	24%
Loans Finnic → Saamic	17	23%
Loans Saamic → Finnic	9	12%
Convergent derivatives	9	12%
Other parallel developments	5	7%
Total	74	100%

Table 2: Summary of the assessments of SSA entries.

The list of Finnic-to-Saami loan etymologies includes nine uncertain ones, of which three (#40 *elo* ~ *eallu*, #41 *eno* ~ *eanu*, #48 *rutto* ~ *roht-tu*) can alternatively be cognates, two (#36 *ampua* ~ *ábbut*, #42 *kajota* ~ *gádjut*) unrelated parallel developments and four (#37 *anoa* ~ *átnut*, #44 *keino* ~ *geaidnu*, #45 *koljo* ~ *goalljo*, #50 *taju* ~ *dádjut*) loans from Saami into Finnic or parallel developments. Among the Saami-to-Finnic loan etymologies, there are two uncertain ones: #52 *aimo* ~ *áibmu* and #59 *poro* ~ *boazu* may be parallel developments. Three of the convergent derivatives of cognate stems (#61 *alus* ~ *vuolus*, #67 *tahtoa* ~ *duostut*, #68 *tunto* ~ *dovdu*) could also conditionally be analyzed as old Finno-Saamic labial vowel derivatives. The parallel development in case #74 (*tuhto* ~ *totku*) could hypothetically be a cognate, too. If we were to accept the possible cognates from these groups, the number of cognates would grow to a maximum of 41 (55% of the SSA corpus).

SSA did not present all of its comparisons as doubtless either. When it comes to the group of items presently found to be loans from

Finnic into Saami (17 in total), SSA expresses reservations in six cases (#35 *alku*, #37 *anoa*, #45 *koljo*, #46 *mantu*, #47 *mulko*, #50 *taju*), all of which, with the exception of #44, are given the correct loan etymology as an alternative. In the group of loans from Saami into Finnic (total 9), all but two comparisons (#52 *aimo*, #53 *eno*) are presented with hesitation in SSA, and three of them (#57 *luppo*, #58 *maarto*, #60 *rouko*) are presented as possible loans, but the primary direction of borrowing is also here stated to be from Finnic into Saami and not vice versa. Two of the cognate stems with a recent labial vowel (#62 *kum-muta*, #67 *tahtoa*; total 10) are given a hesitant comparison in SSA, as well as all the items of the group of other parallel developments (total 5). Adding these together, 20 of the 39 cognate etymologies that are currently rejected were already considered somewhat doubtful in SSA. Finally, 7 of the cognate pairs presented with hesitation in the current study (total 18) are given similar status in SSA (#17 *ilo*, #18 *lamu*, #20 *malo*, #22 *pudota*, #26 *talkoo*, #28 *toivoa*, #30 *torjua*).²⁰

In order to observe the distribution and possible diverging tendencies between different derivational types, the lexical items of this study were also grouped according to the morphological and morphosyntactic properties of the Finnic counterpart. The results are shown in Table 3 on the following page. The column “Cognates” contains the items found to be likely Finnic-Saamic cognates and the column “Non-cognates” the rejected comparisons; “nCogn” and “nNonC” contain the respective numbers of the items (certain+doubted ones in parentheses).

As can be seen, the number of accepted and rejected cognates is rather equal, irrespective of their morphological and morphosyntactic class. The only clear exception is the group of deverbal nouns, where all but one of the seven comparisons of SSA are tentatively rejected on either phonological or semantic-distributional grounds. Still, there

20. It should be noted that the formulations in SSA are sometimes confusing and it is difficult to know how to interpret them correctly; for example, s.v. *mulko*, the dictionary first indicates a cognation and then a loan origin for the Saami item (“= lpN *mul'got* (In Ko Kld) ‘mulkoilla’ (< sm)”). I have classified such cases as uncertain cognate equations by SSA. Additionally, in some cases the editors of SSA may have intended the notation of equation to be read as applying only to the “basic” stem and not necessarily to the variants with suffixal labial vowels, as interpreted in the current article.

	Cognates	nCogn	Non-cognates	nNonC
U-verbs		6 (2+4)		5 (5+0)
Transitive	kutsua, puhua, ?riisua, ?torjua	4 (2+2)	ampua	1 (1+0)
Intransitive	?osua	1 (0+1)	?kyylyä	1 (0+1)
Intr. t-derivative		0 (0+0)	kummuta, mauruta	2 (2+0)
Verb/noun	?torua	1 (0+1)	taju	1 (1+0)
0-verbs		14 (6+8)		8 (5+3)
Transitive	kiskoa, tarpoa, ?vanhoa, ?vitoa; ?toivoa, ?uskoa	6 (2+4)	anoa, kiehtoa, koruo, punoa, ?tahtoa	5 (4+1)
Intransitive	?ulvoa, ?seisoa	2 (0+2)		0 (0+0)
Trans./agentive t-derivative		0 (0+0)	kajota, lumota	2 (0+2)
Intr.&non- agentive t-der.	?pudota, ?tauota, vajota	3 (1+2)		0 (0+0)
Verb/noun	kiro, kumo, siivo	3 (3+0)	mulko	1 (1+0)
Nouns		14 (8+6)		27 (21+6)
Deverbal	?luku	1 (0+1)	alku, ?elo, meno, näkö, teko, ?tunto	6 (4+2)
Simple U/O- derivative	?ilo, kanto, käly, ?lamu, lastu, ?malo, nato, pato, ?ruoko, salko, salo, ulko	12 (8+4)	aimo, ehto, ?eno ¹ , eno ² , kalto, kalu, keino, koljo, lahko, luppo, maarto, mantu, poro, rouko, ?rutto, sumu, ?tuhto, vaimo	18 (15+3)
Complex deriva- tive	?talkoo	1 (0+1)	?alus, ehtoo, kalvoin	3 (2+1)
Total 74		34 (16+18)		40 (31+9)

Table 3: The data grouped according to morphological and morphosyntactic classes.

may be lexemes which have originated from deverbal nouns among the accepted cognates in other groups (*kiro*-, *usko*-, *toivo*-), so it would probably be too hasty to take this as indicative of a relatively young

age for the deverbal derivative type. Additional research will be later conducted on the passive-automotive **u*-verbs in Saami, which are completely missing from the data of the current study; the reason lies in the arrangement of the SSA entries, where both the Finnic and the Saami derivatives of this type are usually listed only under the entries of the corresponding base verbs and thus escaped the data collection procedure, which was based on sieving the keywords.

Among the accepted cognates there are 12 cases showing phonological correspondences that unconditionally exclude the possibility of borrowing from Finnic into Saami or vice versa (though there is a slight possibility of borrowing between Pre-Finnic and Pre-Saami, i.e. before the vowel changes of Proto-Saami but after some aberrant consonant developments had already taken place, cf. SaaN *buošši* ‘bad-tempered (woman)’ < Pre-Saami **paša* ← Pre-Finnic **paša* > Fi. *paha* ‘bad’):

- Fi. *kanto* ~ SaaN *guottu* (< FS **kantov*)
- Fi. *käly* ~ SaaN *gáloj(eatni)* (< FS **käluv*)
- Fi. *kisko-* ~ SaaN *gaiku-* (< FS **kiško-*)
- Fi. *lastu* ~ SaaL *luás'tu* (< FS **lastu*)
- Fi. *nato* ~ SaaS *nååte* (< FS **natov*)
- Fi. *pato* ~ SaaN *buodđu* (< FS **paðo*)
- Fi. *puhu-* ~ SaaN *bossu-* (< FS **pušu-*)
- Fi. *salko* ~ SaaN *čuolggu* (< FS **salko(v)*)
- Fi. *salo* ~ SaaN *suolu* (< FS **salov*)
- Fi. *siivo-* ~ SaaN *divvu-* (< FS **tiivo-*)
- Fi. *tarpo-* ~ SaaN *duorbu-* (< FS **tarpo-*)
- Fi. *vajo-/vaju-* ~ SaaN *vuodjut* (< FS **vajo-*)

The group of conditionally accepted cognates adds 7 more pairs of this kind:

- Fi. *lamu* ?~ SaaN *luomu-* (< FS **lamu*)
- Fi. *malo* ?~ SaaL *muolos* (< FS **malo*)
- Fi. *osu-* ?~ SaaN *oažžu-* (< FS **onču-*)
- Fi. *seiso-*, Vs. *saisa-* ~ SaaN *čuozžu-* (< FS **śanjšo-/śanjša-*)
- Fi. *talko-* ?~ SaaN *duolgu* (< FS **talko*)
- Fi. *tauko-* ?~ SaaN *duovgu-* (< FS **tavko-*)
- Fi. *vanno-* ?~ SaaN *vuordnut* (< FS **vaðno-/vatno-*)

These 12–19 stems thus make up the minimal corpus of lexemes that very likely contain a second-syllable labial vowel reconstruable in the Finno-Saamic protolanguage. It was found above that 34 lexemes in total are likely to belong to this group. So, although more than half of the labial-stem cognates suggested by SSA do not fulfill the present criteria of cognation, there is still a good number of lexical items that fulfill the criteria, and these, moreover, belong to a diverse collection of morphological and morphosyntactic word classes. Whether all of these derivational classes really have their roots in a Finno-Saamic protolanguage or the cognate items rather reflect later shifts to new derivative/stem types, remains a question for further study. Terho Itkonen (1983: 373–374) has noted that many Saami-Finnic words only have a labial stem vowel in one language group and not the other, and there is variation even inside the groups (e.g. SaaN *sadjj* ~ Fi. *hio*- ‘to hone, file’, SaaN *čuožžut* ~ Fi. *seiso*- ~ Est. *seisa*- ‘to stand’). This might be an indication of a secondary spread of the labial stems in the Saami-Finnic linguistic area. Also, it is in principle possible that a labial vowel in cognate words of the current languages reflects e.g. a combination of an illabial stem vowel and a labial consonant (*-av/-äv/-iv) in the protolanguage, which developed into labial vowels in parallel only after the language split. For a *terminus ante quem*, the internal reconstruction of Saami requires the Proto-Saami second syllable low labial vowel to have existed before the end of Proto-Saami phase I (for the metaphonic changes of the initial-syllable vowels, see Korhonen 1981: 110–111). Finnic sound history sets no such internal dating criteria, but, for instance, a closer scrutiny of the sound correspondences of Germanic loanwords might prove useful in gaining a better understanding of the dating and the development of the unstressed labial vowels in Finnic.

Language abbreviations and symbols

<, >	Diachronic development of one phonological shape into another	(Md)M	Moksha-Mordvin
		Ms	Mansi
		Nen	Nenets
←, →	Borrowing from one language into another (sometimes: derivation)	Norw	Norwegian
		PBalt	Proto-Baltic
		PF	Proto-Finnic
Agr	Mikael Agricola's Finnish (mid-16th century)	PFM	Proto-Finno-Mordvin
		PFP	Proto-Finno-Permic
dial	dialectal, in some dialects	PGerm	Proto-Germanic
		PreGerm	Pre-Germanic
Est	Estonian	PS	Proto-Saami
F	Finnic ("Baltic-Finnic")	PSam	Proto-Samoyedic
Fi	Finnish	PScand	Proto-Scandinavian
FiE	Finnish, eastern dialects	PIE	Proto-Indo-European
FiSE	Finnish, southeastern dialects	PU	Proto-Uralic
		Saa	Saami; Proto-Saami
FiSW	Finnish, southwestern dialects	(Saa)A	Akkala Saami
		(Saa)I	Inari Saami
FiW	Finnish, western dialects	(Saa)K	Kildin Saami
FS	(Proto-)Finno-Saamic	(Saa)L	Lule Saami
hist	historical word or concept	(Saa)N	North Saami
Hung	Hungarian	(Saa)P	Pite Saami
Ing	Ingrian (Izhorian)	(Saa)S	South Saami
Ka	Karelian	(Saa)Sk	Skolt Saami
Kh	Khanty	(Saa)T	Ter Saami
Latv	Latvian	(Saa)U	Ume Saami
Li	Livonian	Swe	Swedish
Lith	Lithuanian	Udm	Udmurt
Lu	Ludic	Ve	Veps
(Mari)E	East (Meadow) Mari	Vo	Vote
(Mari)W	West (Hill) Mari	Vs	Võro-Seto (South Estonian)
Md	Mordvin		
(Md)E	Erzya-Mordvin		

Glosses

1	first person	PL	plural
3	third person	PRS	present tense
ACC	accusative	PRET	preterite
GEN	genitive	SG	singular
INF	infinitive	TRANSL	translative (case)
NOM	nominative		

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